A Clinical Lecture
ON
THE BEST MANNER OF EMPLOYING INSTRUMENTS IN CASES OF STRICTURE WHERE MUCH DIFFICULTY EXISTS.

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BY SIR HENRY THOMPSON,

SURGEON EXTRAORDINARY TO H.M. THE KING OF THE BELGIANS; EMERITUS PROFESSOR OF CLINICAL SURGERY IN UNIVERSITY COLLEGE HOSPITAL.

(*Reported by* Mr. G. BUCKSTON BROWNE.)

I HAVE now to consider the question, How are you to deal with a case of stricture of the urethra in which real difficulty exists in passing an instrument into the bladder? Let a case be supposed in which attempts have been made, perhaps by several hands, and hitherto without success.

First, let me point out in what the chief mechanical difficulties in such a case might consist. There are four:—

1. Extreme narrowness of the stricture.
2. The stricture may be tortuous.
3. It may be complicated with false passages.
4. The urethra behind the stricture may be irregularly dilated and reticulated.

Difficulties of another kind, not mechanical, are frequently met with; these are two in number, and are to be considered hereafter—viz., (1) the stricture may be very resilient, and liable to become narrower, and to produce absolute retention on any instrumental contact; and (2) any use of the instrument may produce in the patient an attack of rigors.

1. Let us consider first the mechanical causes of difficulty, of which the first is extreme narrowness.

In regard to this, the first thing you must do is to see the patient make water. The failures to pass the instrument may not necessarily have arisen from narrowing of the urethra or from tortuosity; there may be a false passage in the canal. It may, indeed, be that there is no stricture at all. No greater mistakes are made than those which occur with patients who have little or no stricture, either from the surgeon not knowing well how to pass the instrument, or from there being a false passage into which it enters, so that it does not reach the bladder at all. You are first, then, to see the stream of water, perhaps on more than one occasion, so as to estimate it fairly, and you will judge by that what size of instrument is to be used. And always let the instrument correspond with the size of the stream which you see; but it should correspond only in this way—the instrument should be a little smaller. You will sometimes see a patient who scarcely passes a stream at all; the urine issues only in a succession of drops. This being his constant, and not a temporary or accidental, condition, how very small must be the instrument which is adapted in size to traverse fairly the stricture.

The first step to be taken with such a case, after having ascertained, as I assume to have been done, the situation of the stricture, is to introduce very gently the smallest English gum catheter without a stylet, and try to insinuate it through the obstruction. For this purpose I have endeavoured to obtain some exceedingly small instruments, much smaller than any hitherto made.* This tiny catheter, which I show you, containing a slender steel thread rather than a stylet, may be used either with or without it. The value of this little instrument, after its extreme tenuity, is its ability to transmit a drop of urine through its interior, and so assure you of its position when the bladder has been reached, an assurance, I need hardly tell you, of great importance. It is worth while making a careful and somewhat prolonged trial, and if you succeed, the instrument is to be tied in at once and the route secured. If I fail with this, I then try a silver catheter of the smallest size.

But there is one very important matter in relation to the silver instrument—namely, that it is an extremely dangerous one in inexperienced or in incautious hands. Nothing is easier than to implicate its slender point in a lacuna, and if the slightest force be used, the point leaves the route and finds a track among the loose tissues outside the urethral mucous membrane, and thus a false passage is commenced. If you cannot train your hand to employ it with extreme lightness and delicacy, by no means use it. It should be held and moved with so much tenderness, that if the point meets with any resistance in its course, the fingers rather should slip down the shaft than communicate pressure to the instrument. Any kind of force in its use is not to be thought of—its only value is in its capacity for being insinuated between closely applied surfaces, and any sense of opposition to its point is a clear intimation that its route may lie right or left, but not straight on. It is not fit for the hand of a tyro, but when he is habituated to the use of somewhat larger instruments, the ability to use this will follow. A careful trial, however, with the very small gum catheter, first without and then with the stylet, will in many cases make this unnecessary; but these failing, I know no instrument so valuable as a very fine silver one with a little increase of size in the shaft, to render it steady. The final three inches should not exceed half the size of No. 1 of the English scale; the shaft should gradually rise to fully No. 2.

2. A stricture may be more or less tortuous; in other words, it does not necessarily follow the exact direction of the urethra.

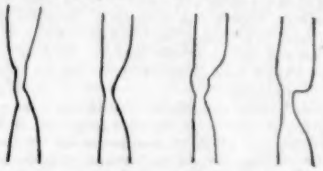
It may be a little on this side of the axis or on that, not necessarily in the middle. You may see this sometimes in the dead body; and you may infer it from experience on the living. When you have to deal with a very narrow or with a tortuous stricture, there are two quite distinct systems of using an instrument, either of which you may employ. What I have to say, then, applies to the manipulation necessary in all cases of difficulty under the present and preceding heads; and I have reserved it therefore until now. First, the little instrument employed, whatever its nature, may be applied by what may be called "groping"—that is, by carrying the point in any and every direction, with the utmost care of course, until by chance it has entered into the stricture, as you may feel by the sensation of the point being "held" or "grasped." For this purpose very slender solid instruments are made of gum-elastic, of catgut covered or not with gum, or of whalebone, since these can be produced of rather smaller size than the hollow instruments which I have just described. In order to add to the chance, as is supposed, of finding the orifice, there are some of the first-named material, the ends of which are formed somewhat into the shape of a corkscrew, or are otherwise made to deviate from a straight line. All these are of French design and workmanship, but none have the advantage of being hollow, to demonstrate their presence in the bladder when they arrive there.

Now, I advise you not to rely on mere groping to find the orifice; it is exceedingly dull, mechanical work to be constantly groping for a considerable time on the chance of success.

There is a method of search, however, conducted on a fixed principle, which I much prefer and always employ. I advise you to adopt that, or any other you can devise, provided that it be a systematic one, and also an exhaustive manner of making the necessary exploration and researches for the orifice of the stricture. Some of you have often seen me apply it to patients in the wards upstairs. According to this manner you proceed systematically and examine each side of the urethra *seriatim*. We will suppose the urethra to require examination on four sides—a roof, a floor, a right side, and a left side. You are to take your slender silver catheter and slide its point delicately along each side successively from the orifice to the place of obstruction. If the orifice of the stricture is not *exactly* in the middle line, and we may fairly believe that it rarely is so, then there is one side of the passage which will more

* Messrs. Weiss and Son have taken great pains to accomplish this for me, and have produced some slender delicate instruments much smaller than No. 1, which have been of great service.

easily lead into the narrow way than any other. These diagrams will show what I mean. If I go down on this side I shall probably not get into the stricture; but if I slide



down gradually on the other I shall probably get the instrument in, because you see there is less obstruction on that side. Begin, then, by the roof. The roof is the firmest part, the least likely to furnish obstruction in the way of ducts or lacunæ, and by following it you will be most likely to carry the point in. The floor, on the contrary, is the softest, loosest, and most spongy part, and will be most likely to yield to the instrument and give way. If your first effort does not succeed, take the right side; if that does not do, take the left; if that fails, try the floor. If you are very careful you may make the attempt in this manner for thirty or forty minutes without doing any damage; but if the patient suffers, or if he bleeds, or if you are losing patience, give up the task, or you may make a false passage, and increase the difficulty considerably.

3. The existence of a false passage leading out of the urethra is another serious obstacle to the introduction of instruments into the bladder.

The principle which must guide your action here is to be very careful to avoid the side on which the false passage is. A false passage commences usually on the floor, and no doubt for a reason already mentioned—viz., the fact of the structures below being looser and more delicate than those above. When you examine a patient with a false passage, you may find the instrument passing to its very end, notwithstanding which no urine flows. Hence the false notion of stricture at the neck of the bladder. When the instrument has thus passed, put your finger into the rectum, and you will know instantly whether there is a false passage; for, if so, there are only the coats of the bowel, which are very thin, between your finger and the instrument, so that you feel it very distinctly; and very commonly not in the middle line, but rather to the right or to the left. But if the instrument is in the right passage, the whole thickness of the prostate, not always very considerable, is felt between it and your finger. It is almost always in the bulbous portion that the instrument leaves the urethra and gets under the prostate. What you are to do, then, is to withdraw the catheter two inches or so, pass it on again, keeping as close along the upper part of the urethra as you can, ascertaining by means of the finger in the bowel that the instrument is not passing into the old route. But when a false passage exists, it sometimes constitutes the chief obstacle to the introduction of an instrument, for, as I have before hinted, the stricture itself may be only inconsiderable. The size of the stream will help to determine this point; and if, so far from being a mere thread it has a volume equal to a No. 6 or 7 catheter, use a No. 5 silver one, so that you can guide it, and try each side of the urethra successively until you discover which it is that enables you to clear the orifice of the false passage. Remember the result, and you have a key to the difficulty which will enable you to overcome it with ease on the next occasion.

4. Difficulty presented by dilatation and reticulation of the urethra behind the stricture.

Suppose next, that, following these hints, you have carried the instrument through the stricture; there is a sort of grasp felt on attempting to move the instrument which is quite unmistakable. But that very "grasp," which you are so satisfied to feel, makes it less easy to manipulate the point of the catheter after it is through the stricture, and you may have a source of danger to encounter in the urethra beyond. Thus the mucous membrane, being sometimes reticulated from the presence of dilated lacunæ, it is easy to engage the point of the instrument in one of these, and make a false passage. Besides this, as the result of long continued fluid pressure and straining, the urethra behind the stricture is occasionally much dilated, and the whole surface is so irregular that it requires care and an acquaintance with this condition to traverse it safely. Here especially, with a small instrument already firmly grasped, you may require all the caution you can command in completing its safe course into the bladder.

The consideration of the difficulties which are not mechanical must be deferred to another meeting.

ON EXCISION OF THE ANKLE.*

BY JAMES F. WEST, F.R.C.S.,
SENIOR SURGEON TO THE QUEEN'S HOSPITAL, BIRMINGHAM.

EXCISION of the ankle, although admitted to be of the highest value in gunshot fractures of the bones implicating the tibio-tarsal articulation, and also to be very suitable in severe cases of compound dislocation of the ankle, has not hitherto been regarded with much favour for chronic disease of that joint.

Resection has probably been less frequently performed of this than of any of the other joints. Objections have been made to it on various grounds. Prejudice against the operation has been entertained and freely expressed by some, who, having never performed it, have condemned it as useless, or even improper, for chronic affections of the ankle-joint. Thus Holmes, in the first edition of his System of Surgery, spoke disparagingly of the operation, having never done it; but in his second edition he says—"my individual experience, though limited to two cases, which recovered very rapidly, has been very satisfactory. ..... I believe it is very advisable and advantageous in appropriate cases." And again he says in another place—"In cases of successful excision the limb is very much superior in usefulness to any stump which can be formed, whether by Syme's or any other method of amputation." Others who have had one or two unfortunate cases have been deterred from performing resection again, forgetting that almost always the early days of any operation are beset with obstacles and disappointments. On the other hand, those who, like Hancock, Langenbeck, Lee, and Heyfelder, have given it a fair trial have been rewarded with excellent results; and their success ought, I think, to establish it for ever as one of the most legitimate resection of joints which surgery has at its command.

Resection of the ankle, or, in fact, of any other joint, is of course not justifiable until attempts have been made to remedy the joint-mischief by all the means at our disposal. Rest; immobilisation; counter-irritation, by blisters, iodine, or by the actual cautery; and, lastly, free incision into the joint and removal, if possible, of any fragments of loose necrosed bone,—must each, in succession, have been resorted to; while at the same time the patient's general condition has been to the utmost improved by fresh air, good living, and such tonics as iron, quinine, and cod-liver oil.

Still, after the adoption of all these measures, suppuration in and about the joint, pulpy degeneration of synovial membrane, ulceration of cartilage, and caries of the cancellous structure of the bones, will in some cases continue, and then arises the question, Shall the leg be amputated by Syme's or Pirogoff's method, or shall the patient have the chance first offered to him of keeping his foot, even although this will necessitate a somewhat difficult and tedious operation and a protracted convalescence?

I entertain a strong opinion that by adopting Ollier's (of Lyons) mode of subperiosteal resection, the future history of excision of the ankle will be far more satisfactory than the past has been. Experience has also shown that partial resections had better be given up, and that it is better to excise the entire joint than to limit the operation to the removal of the obviously diseased portions of it. Attention to the following measures during the after-treatment will also add greatly to the number of successful cases:—1. Early

* A paper read before the Birmingham and Midland Counties Branch of the British Medical Association.

and complete immobilisation of the limb. 2. The use of the anterior iron bracketed splint, by means of which, as after resections of the knee, the leg can be suspended in a Salter's swing, and the lateral openings formed in the joint dressed without much disturbance of the parts. Lastly, the employment of drainage-tubes, passed from one side of the ankle to the other, by which pus and carious débris may be removed, and through which the wound may be daily washed out by some weak disinfecting solution, as carbolic acid or Condy's fluid.

The originator of resections, as of so many things that still hold good in surgery, was Celsus, as we learn from this passage: "Ideo quod excedit, abscindendum est." But the first to apply this principle to the ankle was an English provincial surgeon, Hey, of Leeds, who in 1766 resected the lower ends of the tibia and fibula for compound dislocation; and since that time resection of the ankle has frequently been performed under similar circumstances with such good results that few would question the propriety of performing resection for compound dislocation of that joint, rather than of at once recommending amputation of the leg. Hey's success led to the adoption of the operation for chronic articular disease by Moreau, and in 1792 he first removed the lower ends of tibia and fibula for disease.

It is perhaps advisable to recall the names of those who have performed the operation, and who have expressed their opinion in favour of it, before calling attention to the case which I intend to bring under notice, and which I hope and believe will induce many other surgeons to give it a trial in any suitable case they may have under their care.

Mr. Hancock, in his lectures at the Royal College of Surgeons in 1867, referred to 19 successful cases of his own, and mentioned that Heyfelder had given 26 examples of this operation, of which 5 died, 1 suffered consecutive amputation, and the rest proved successful; and that of Jaeger's 24 cases 23 proved successful and only 1 died.*

Mr. Stokes, in the *Dublin Quarterly Review* of 1870 enumerates 51 cases of resection of this joint, with good results in 38. No doubt many of these operations were performed for traumatic injuries, and objection may be taken to them on that account; but, on the other hand, numerous cases may be found in the medical journals of the past few years, and in the works of recent surgical writers, in which resection has been performed for chronic articular disease with admirable results. Thus, in March, 1870, Mr. Erichsen excised the ankle of a woman, aged twenty-eight, for scrofulous disease of the ankle, removing at the same time part of the os calcis, with success.

In December, 1870, Dr. Watson showed at the Medico-Chirurgical Society of Edinburgh a boy from whose right foot he had some months previously excised the astragalus and the ends of the tibia and fibula. The result was remarkably good, the patient being able to stand on the foot, having considerable power of flexion and extension, and the limb not being shortened more than half an inch.

In THE LANCET for Jan. 20th, 1872, is a case of excision of the ankle by Mr. Canton, performed at Charing-cross Hospital on Dec. 9th, 1871, on a man, aged thirty-one, who had had chronic disease of the joint for eight years. The man's progress is said to have been "highly satisfactory, and at no time had there been any constitutional symptoms."

In the *British Medical Journal* of Sept. 7th, 1872, Mr. Sydney Jones records the case of a boy aged fifteen, whose ankle was excised for articular caries on Jan. 24th. The limb was not taken off the splint for two months, and "there was then firm bony union, and the line of the foot with the leg was very good."

Chassaignac† performed resection of the ankle on a woman aged twenty-three for chronic suppuration in the joint and necrosis of the fibula, in whom there was such "extreme mobility of the foot that it was only held in place by the skin and by the tendons, which were in part exposed," and yet after two months a good recovery occurred.

Ollier, of Lyons, relates a case of resection for comminuted fracture of the bones of the ankle, which seems to surpass all the others on record, for in that instance there was so much reproduction of bone that the patient could walk ten miles, and even dance.

Sédillot, in a memoir read before the Academy of Sciences in 1867, also speaks highly of his experience of this operation.

Lastly, in Jan. 1874, and again in May, 1875, Mr. Henry Lee brought the subject of resection of the ankle forward at the Medico-Chirurgical Society of London, and after relating his own experience, which was highly in favour of it, a discussion ensued, in which Messrs. MacCormac, Maunder, and others joined, and most of them had a good report to give of the operation.

I will now briefly narrate a case in my practice, and then call attention to the mode of operating which I prefer, and to the advantages which resection offers.

Alfred C——, aged sixteen, a stable-boy, was admitted into the Queen's Hospital on Nov. 10th, 1873, for synovitis of the ankle-joint, followed by ostitis of the tibia and fibula. The following history was obtained:—Ten weeks previously he had sprained his ankle while jumping from a loft, a distance of ten feet. Considerable swelling followed, but not much pain, so that he was able to continue his work for a fortnight; at the end of that time he was obliged to take to his bed. Previous to admission an incision had been made into the swelling, and a large quantity of pus evacuated. He complained of great pain in the joint at night.

On admission, there was considerable swelling around the ankle, and the patient was unable to put the foot to the ground. Openings on either side of the joint discharged a large quantity of fetid pus. There was great pain on the slightest movement, and the patient could obtain but little rest at night. By means of a probe it was found that the lower ends of the fibula and tibia were necrosed to a considerable extent. The joint was immobilised by means of a gutta-percha splint, and the patient was ordered half an ounce of the iodide-of-iron mixture three times a day.

Nov. 25th.—Patient's health being remarkably good, but the purulent discharge continuing copious, chloroform was administered, the actual cautery applied to the surface, and subsequently a drainage-tube passed right through the joint.

Dec. 20th.—The lad's general health being good, and the case seeming favourable for resection, the operation was performed as follows:—Lateral incisions were made parallel to the tibia and fibula; the fibula was first divided with the chain saw, then the tibia with Butcher's saw, and lastly the astragalus with Hey's saw. The articular surfaces of all the bones were found to be devoid of cartilage and superficially necrosed. The operation was performed by Ollier's subperiosteal method, and, Esmarch's bandage having been used, it was quite bloodless. No tendons were divided. A drainage-tube was inserted between the bones of the leg and foot, and the limb at once immobilised with bandages and a gutta-percha splint. Chloroform was used, and well borne by the patient.

28th.—A week after the operation it was noticed that there was free discharge, and that the patient's condition was very good. An anterior splint and swing apparatus (Salter's) were employed. A fresh drainage-tube was passed through from one side of the joint to the other, and he was ordered one ounce of quinine mixture three times a day.

Jan. 22nd.—Less discharge; limb comfortable; eats and sleeps well. Carbolic acid lotion used for dressing, as the discharge is fetid.

Feb. 2nd.—Granulations in the wound rather exuberant. Red lotion to be used, and pressure made by means of a piece of sheet lead around the ankle.

March 2nd.—Wound nearly healed, and much general consolidation about the union of the bones, so that he can lift the limb easily. This was about eleven weeks after operation.

A starch bandage was subsequently applied, and it was noticed on March 23rd that the union of the bones was firmly consolidated, that the lines of incisions looked healthy, but that there was still some discharge of pus.

April 4th.—Patient left the hospital, less than four months after the operation, with the wounds discharging but little, and the shortening was then about one inch.

He is now, December, 1875, able to earn his living, and to walk four to five miles without inconvenience.*

My manner of making the incisions in this case was almost identical with that described and recommended by

* THE LANCET, vol. ii. 1867, p. 121.
† Opérations Chirurgicales, vol. i., p. 706.

* The patient was exhibited at the meeting on Dec. 9th, 1875; there was not more than an inch of shortening, and the bones of the leg and foot were firmly anchylosed together. Mr. Prosser, of Bromsgrove, has paid great attention to the boy, and has conduced largely to the good result.

Hancock, except that the lateral incisions were not carried forwards and downwards on the tibial side as far as the projection of the inner cuneiform bone, nor on the fibular side to within half an inch of the base of the outer metatarsal bone; such free incisions are, in my opinion, rarely necessary, and further tend rather to lead to subsequent suppuration among the tarsal bones. Lateral incisions are far preferable to the semicircular incisions which I have seen employed at the Leeds Infirmary and elsewhere, inasmuch as with the former all the tendons are saved, and no vessel of importance is divided. Excision of the ankle is one of those operations in which the advantages afforded by Esmarch's bandage are most appreciated. Not only is the patient free from hæmorrhage, but in consequence of the parts not being covered with blood, we can see clearly what we are doing, and need only take away as much of either of the bones as is absolutely diseased, and if on taking one section of bone caries is still evident, we can take slice after slice of bone away until we get to sound osseous tissue, without having our view of the joint cavity in any way obstructed. The joint having been opened on the outer side and the fibula exposed, I separate the periosteum from it with the raspatory, and then cut off the lower end of that bone with the chain-saw. I prefer the chain-saw because it can readily be passed round the bone, and can be kept close to it, so as not to endanger the peronei tendons, and hence I think it presents greater advantages than Hey's or Butcher's saw. I then divide the internal lateral ligament, keeping close to the bone, so as to avoid the flexor tendons and the posterior tibial artery, push the lower end of the tibia through the fibular opening, denude the periosteum, and cut the articular surface and inner malleolus off with Butcher's saw, and lastly with Hey's saw I remove the upper part of the astragalus. Should that bone be extensively diseased it should be freely gouged, and the carious or necrosed portions cleared out with the osteotrite. In some cases it has been successfully removed entire, along with some portion of other of the tarsal bones, as in Mr. Swain's case of a boy, aged fourteen, for whom at various times he excised the ankle-joint and the bones of the tarsus for caries; but, as a rule, when more than one of the tarsal bones is largely affected with caries, it will be better to amputate at once by Syme's method. Pirogoff's operation, though recommended by some surgeons, is not, as I have before proved, suitable in such cases, in consequence of the great risk of caries recurring in the remaining portion of the os calcis.

I hold that complete resection of the joint is better than partial, and in that respect I differ from Mr. Bryant, who says, "Resection in cases of disease is very hazardous, except in partial resection of the fibula, which is generally successful." Now, having myself tried partial resection of the fibula more than once, and especially recently on a boy aged sixteen, whose disease seemed limited to that bone, and having had subsequently to submit the patient to secondary amputation, I cannot agree with Mr. Bryant's opinion, and I think he will modify it when he has had some personal experience of complete resection of the ankle, which up to the present time he admits he has not had.

Immobilisation of the limb before the patient leaves the operating-table I deem to be essential. I care very little whether that condition be obtained by a gutta-percha or leather case or by a starch or plaster of Paris bandage with suitable windows on either side of the ankle, but the immobilisation must be thorough, and the apparatus, whatever it is, should not, if it can be avoided, be disturbed for at least a couple of months. The limb may, with comfort to the patient, be suspended by one of Bartleet's or Watson's anterior splints in a Salter's swing.

As new bone is often formed rapidly in young subjects, and concomitantly there is an abundance of exudation material about the ankle, it is advisable in the course of two or three months to give support and compression to the new tissues by means of a piece of sheet lead one-eighth of an inch in thickness, retained *in situ* by careful bandaging.

Another feature of the operation of great value, to my thinking, is the preservation of the periosteum by means of careful employment of the raspatory, so as to avoid slitting that membrane. The instrument should be kept as close to the bone as possible, so as to detach some of the bone granules along with the periosteum.

The idea of regenerating bone by this means, so generally attributed to Ollier, of Lyons, belongs, as Giraldès candidly points out in his "Mal. Chir. des Enfants," to our countryman Goodsir, who, as early as 1845, discovered the fact that by preservation of the periosteum with the subjacent and still adherent fine particles of bone new bone could be formed.

Preservation of the length of the limb and greater consolidation of the parts, both points of immense importance as regards the patient's future condition, are gained by this method of subperiosteal resection, and I cordially echo all that has been said in its favour by Professor von Langenbeck in his work "On the After-results of Joint Resections," and not less by another great authority in the treatment of diseases of joints, Dr. Sayre, of New York. Drainage-tubes applied at the time of resection, so that the joint cavity may be kept free from discharge, and thoroughly cleansed daily with some weak disinfectant solution, are small, though not unimportant, matters to be attended to in the after-treatment of the case.

Having now glanced at most of the points connected with the operation, let me, in conclusion, commend it to your consideration. It may be the means of saving a foot; it is true the foot will probably be anchylosed to the bones of the leg, but still it will prove more valuable and convenient for walking than any artificial foot that can be fitted to a stump. Sometimes there is a sort of fibrous anchylosis between the bones of the leg and foot which allows of such free movement that the patient, as in one of Ollier's cases, may walk ten miles and dance an evening through. Firm bony anchylosis is very likely to result, and there will probably be comparatively little shortening if the periosteum is left.

The chief objection that can be urged against the operation is that recovery from it is tedious and protracted, and therefore that it is more applicable for patients in the upper class of society than to those who are found in hospitals. Still this is after all not a very formidable objection; three to six months' confinement will certainly be necessary, but perhaps a patient who had submitted to amputation of the leg might be quite as long before his stump would bear the pressure of an artificial limb.

Another argument in favour of resection is that it is scarcely a more dangerous operation than amputation, either at the ankle or in the lower third of the leg; and, lastly, it has this to its credit, that should resection fail, as it sometimes does, from such patients having but little constitutional or recuperative power, we can still submit the limb to amputation as a *dernier ressort*.

Birmingham.

ON SALICYLIC ACID.

By J. C. OGILVIE WILL, M.D.,
ASSISTANT-SURGEON TO THE ABERDEEN ROYAL INFIRMARY.

ALTHOUGH salicylic acid has been much vaunted by continental surgeons, more especially by Thiersch and Kolbe, as superior as an antiseptic to carbolic acid, it has not, so far as I am aware, come into general use in this country, and the recent discussion at the Clinical Society will probably not do much to advance its cause. A pretty extended trial of it has, however, convinced me that in it we possess an agent of extreme value in a large class of cases; but I do not intend at present entering on a detailed account of the cases in which it is found useful, but simply to direct attention to its value as an antiseptic, to its advantages over other substances used for a like purpose, and to a few of the forms in which it may be employed, with brief notes of some cases as illustrative of its beneficial action.

Godeffroy, by a series of careful experiments, proved that salicylic acid is three times as powerful in its anti-fermentative action as carbolic acid. He used dough formed of yeast, flour, and water, to separate portions of which he added varying quantities of carbolic and salicylic acids, and noted the length of time that elapsed before fermentation took place. In other experiments, milk, urine, beer,

mustard-meal, and other substances have been employed, the results invariably proving that fermentation was either prevented or greatly retarded by the addition of salicylic acid. For example, fresh cow's milk mixed with 0·04 per cent. of salicylic acid, curdled thirty-six hours later than a similar quantity of milk to which no agent had been added; urine, to which salicylic acid had been added, remained clear and free from odour till the third day, while another specimen of the same urine, with which nothing had been mixed, was putrid. Its anti-fermentative powers are already so well recognised by chemists in this country, that many of them add small quantities of the acid to such preparations as are liable to undergo fermentative decomposition, with most satisfactory results. These experiments are undoubtedly conclusive as to the value of the agent used as a preventive of fermentation, and experience has proved that it is equally reliable as a preventive and corrective of putrefaction when applied to sores and wounds, and that it materially assists reparative action.

In proof of its powers as a corrector of putrefaction, I may briefly refer to two cases: one of amputation of the thigh, at present under Prof. Pirrie's care in the Aberdeen Royal Infirmary; the other, mammary cancer.

The former patient, a girl aged nineteen, was the subject of extensive necrosis of the femur; she was much reduced, and amputation was had recourse to, but with very grave doubts as to the ultimate result. The vessels were acupressed and water-dressing applied. As was expected, there was considerable suppuration, accompanied by great fetor. The applications used at this time were daily syringing with 1 to 40 solution of carbolic acid and dressings impregnated with red lotion. Salicylic ointment was then applied, and within two days the fetor entirely disappeared and healing action commenced. I on several occasions directed the attention of the students to the almost marvellous change that in this case followed the use of the new antiseptic. Another noteworthy point connected with the case was the extremely small, healthy, and highly vascular condition of the granulations with which the lips of the wound were studded, forming a marked contrast to those which Mr. Callender stated he had seen when salicylic dressings were employed. The ointment used was the one containing paraffin, the formula for which will be found below, and though it is a pretty strong one—1 part of acid to 7,—the patient repeatedly stated that it neither gave rise to pain nor smarting.

In a case of medullary cancer of the mamma, where the fungoid growth involved the entire gland, extended upwards nearly to the clavicle and well down into the axilla, and from which the fetor was so intense that the patient had to be removed to an out-of-the-way apartment, I ordered daily syringing with a 1 to 40 carbolic solution and a liniment of olive oil and salicylic acid, with which the sore was covered. By these applications putrefactive changes were arrested, the fetor disappeared, and the patient was rendered comparatively comfortable, while the attendants were not, as before, repelled from attending to her, which they had been by the disgusting odour pervading the atmosphere surrounding her.

These two cases of themselves show that salicylic acid is a trustworthy antiseptic. But carbolic acid has been proved beyond doubt to be so also, and boracic acid is largely used for similar purposes; therefore, unless salicylic acid possesses advantages over both, its substitution for either cannot be justified. It does, however, seem to me to possess certain advantages, which, though few in number, are not of less importance on that account; they may, I think, be best elicited by comparing carbolic and boracic acids with it. The two manifest objections to the use of carbolic acid, valuable agent though it be, are its irritating action and its smell. Salicylic acid can hardly be termed an irritant, and preparations containing only a small percentage of it can be thoroughly relied on as trustworthy antiputrescents, and it is odourless. These two points constitute its main claims to superiority to carbolic acid. The more important of the two is, however, not yet universally allowed, for, from the statements made by Mr. Callender and Sir William Jenner at the Clinical Society's recent meeting, it would seem that in their experience salicylic acid had displayed most markedly irritant properties. But this is utterly at variance with the observations of continental observers, and also with my own, even where very much stronger preparations have been employed, for, though I have used it constantly since January, in only one case has pain been complained of—in that of a large varicose ulcer of the leg, for which a 1 to 8 ointment was prescribed,—and I have never seen the vesicular eruption, to which Sir William Jenner referred, following its action. But bearing the remarks of these accurate observers in mind, and for the purpose of testing whether it really gives rise to irritation or not, I dusted a granulating surface with the pure acid, purposely selecting a very nervous and susceptible patient, and one who was prone to give vent to his feelings on the slightest provocation. A number of students were present in the ward at the time, and heard the man state distinctly that he felt neither pain nor smarting; an hour afterwards I again visited him, and he still said that there had not been any pain. I then applied a little water to the acid, and rubbed it gently into the surface, but, beyond the slight uneasiness due to the pressure of my finger, he felt nothing, and next day the nurse said that she thought the man had been easier than usual. It seems almost impossible to reconcile this statement with those before referred to as emanating from Mr. Callender and Sir W. Jenner, and so different are they that one would be almost led to infer that either my sample of acid was a very weak one, and theirs a very strong one, or that some impurity had crept into the specimen employed, or that it was due to some peculiarity of constitution of the patients treated by it.

With regard to boracic acid, very many still doubt its reliability as an antiseptic, and I confess I am not yet convinced that implicit trust can be placed in it; but even granting that it is a useful agent, on account of the extreme difficulty of blending it with fatty substances it is the bane of those who have to compound ointments into the composition of which it enters. Salicylic acid can, on the contrary, be easily incorporated with such menstrua; salicylic acid is, on the other hand, only sparingly soluble in water, but a sufficiently strong watery solution can be readily prepared by the addition of a small quantity of biborate of soda and heating. The presence of a minute portion of borax could only seldom be looked on as objectionable, and might in fact be of value in those cases where the action of a mild astringent is indicated. Still, as aqueous solutions of carbolic and boracic acids of the strength now in vogue do not act as irritants, it is unlikely that watery solutions of salicylic acid will ever come into general use, though Thiersch and others employ them. I certainly do not class this as a virtue possessed by the new antiseptic, but for the reasons given it can hardly be looked on as an objection. Finally, salicylic acid is not volatile, therefore dressings impregnated with it retain their antiseptic properties longer; it is tasteless, and non-poisonous.

Preparations of Salicylic Acid.—Thiersch, who follows Lister's mode of treatment, with the exception of the substitution of salicylic for carbolic acid, employs cotton-wadding or jute impregnated with the acid in place of gauze; but as the preparation of his dressings is a complicated process, and requires a lengthy description, I may refer to notices of his paper which appeared in a medical contemporary for May 26th and June 2nd of the present year, where full particulars are given. The watery solutions employed by him contain 1 part of acid in 300 parts of water. As an application to granulating surfaces a lotion containing 1 part of acid, 3 of sodium phosphate, and 50 of water has been found useful. As already mentioned, heat and the addition of borax increase its solubility; a clear lotion of considerable strength can thus be obtained: for instance, ten grains of acid can be readily dissolved in one ounce of water by heating and then adding six grains of borax, or even twenty grains of the acid will be taken up by an ounce of water if fourteen grains of borax are added. These solutions, in addition to their use as lotions, may be used as gargles, where an antiseptic and astringent gargle is indicated. To a surface where it can be accurately applied, and where the discharge is slight, though I have tried it with excellent effect where it was profuse, as in the case of the girl above noticed, the cerate suggested by Professor Lister for rodent ulcer—salicylic taking the place of boracic acid—is a nice application. The formula is from half a drachm to a drachm of salicylic acid, one drachm of white wax, two drachms of paraffin, and two drachms of almond oil; melt and rub up in a heated mortar. It should be spread on strips of muslin or fine linen.

Another ointment may be made of sperm oil, one drachm and a half; oil of theobroma, five drachms and a half; salicylic acid, from half a drachm to a drachm. This forms a thick paste, which should be thickly spread on lint. The heat of the surface acting on the oil of theobroma, a diffusible ointment is formed, which is a suitable application when it is desired to have the discharge thoroughly saturated with the antiseptic. An ointment less easily acted on by the body-heat consists of sperm oil and paraffin, of each a drachm and a half; oil of theobroma, two drachms; oil of almonds, one drachm; salicylic acid, from half a drachm to a drachm.

A very simple and most useful ointment, and one which answers admirably in some affections of the skin, is formed of half a drachm to a drachm of the acid to seven drachms of simple ointment. Though neither watery nor oily preparations of this acid belong to what is termed elegant pharmacy, yet a liniment of salicylic acid and olive oil will be found of much efficacy in burns; as an example, I may cite a case of burn, involving the upper arm and nearly the whole back of a child aged seven, where I recently employed it. Carron oil had been applied; and when my advice was requested, two days after, free suppuration had taken place, accompanied by great fetor. Lint soaked in olive oil and salicylic acid—twelve drachms of the acid to sixteen ounces of oil—was prescribed. The result was most satisfactory; the fetor disappearing, the suppuration rapidly decreasing, the pain greatly abating, and kindly healing action taking place. In less than a fortnight the whole surface was healed, with the exception of two small spots covered by healthy granulations, to which red lotion was applied. I have since found that a much weaker oily solution (two drachms of the acid to eight ounces of oil) was all-sufficient in a case of severe scald of the foot lately under treatment.

For cancerous sores Thiersch recommends dusting with the pure acid, or with equal parts of the powder and starch, or powder formed of charcoal and the acid might be employed for the same purpose, or for dusting over the face of poultices applied to sloughing surfaces. Endless preparations might be devised; but those I have described seem to me as useful as any combinations with which I am acquainted, and therefore I shall leave others to modify them in any way that may suit their tastes or modes of treatment.

Though I stated in the outset that I did not intend entering on details of cases, yet I cannot refrain from urging its use in eczematous affections, for nowhere is its beneficial action more marked than in them. In the eczema of children, more especially in that found affecting the head and face, it is far superior to any remedy I have yet employed; it was, in fact, the results attending the use of salicylic acid in a case of the kind that first convinced me of its value, and I have since found that others have formed a like estimate of it in similar cases. A child, aged eighteen months, had been under my care for many weeks with a patch of eczema rubrum on the cheek; I had tried all kinds of local applications, and had given arsenic and iron wine internally, but with no avail; for though at times it seemed to be giving way to treatment, a fit of itching, I suppose, had caused the child to rub it, and increased irritation always followed. I had not before used salicylic acid, and had but little faith in good accruing from its exhibition, but as a last resource I prescribed an ointment containing one drachm of acid to an ounce of lard. When I next visited the child, a few days after, the patch had nearly healed, and very shortly after it was perfectly whole. In another case the result was almost equally striking, but here it was the first application used. A child, aged six months, had a patch of E. impetiginodes on the occiput; it had first appeared about a month before. As some parts were thickly covered by crusts, a poultice was used to detach them, and then salicylic ointment was rubbed in. In six days every vestige of disease had disappeared. A brother and sister, aged three and five, were the subjects of eczema narium of short standing. Salicylic ointment was applied on a Friday, and on the following Monday the surfaces were perfectly healed. It is unnecessary to occupy space by entering on details of other cases, but I may simply say that in very many I have found it answer admirably.

Aberdeen.

CASES OF SCIATICA AND NEURALGIA SUCCESSFULLY TREATED BY GALVANISM.

BY S. J. KNOTT, M.R.C.S.,

MEDICAL SUPERINTENDENT OF GALVANISM, ST. MARY'S HOSPITAL; LATE TUTOR AND PATHOLOGIST, ETC.

As sciatica and neuralgia are at times most obstinate complaints to treat, even by the most skilful, I have much pleasure in publishing several cases treated by me with galvanism, some of them most chronic, and defying all medicines. If there is any inflammation of the nerve, then galvanism must be used cautiously. I believe in all cases where the nerve is implicated that faradisation would cause great pain, and do harm. The great thing to determine is how the galvanism acts in these cases, because it does good in cases where several counter-irritants have been used, such as blisters, liniments, &c. It depends on the cause of the sciatica or the neuralgia how the galvanism is used, and if the cause is decided on, then the amount of galvanism applied would be, up to a certain amount, as a tonic and stimulant to a nerve which is asthenic; the cells used would be few, and the application light. But if the complaint has been caused by cold, sitting on a wet seat, gout, &c., and the nerve is tender when pressed upon, and the pain very acute, then the cells must be very much increased, and the poles pressed well into the part. The operation should be only for a few minutes, but severe. Sometimes around the cutaneous parts on which the charcoal points have been placed there occurs a herpetic eruption. If galvanism is applied in this way it is the most powerful counter-irritant possible, and the relief to the sufferer is very great.

Sometimes one has to treat cases of neuralgia caused by great debility, at other times shock, and often in two applications the patients are well. Now no medicines do this, and if any apparent benefit is obtained the stomach or some other organ suffers, as the head does in large doses of quinine. Then there is the morphia treatment by hypodermic injection. Now this line of treatment is all very well for the time being, to relieve the great pain and distress, but does it cure the malady? No. About five months ago five cases came under my notice where for months and months men had been treated with morphia injections. One man had got up to four grains and three quarters daily. If this kind of treatment is persisted in where is it to stop? the patient may as well be an opium eater. At last this particular patient got a large abscess in the gluteal region, from the irritation of passing the needle, I presume, and thus got rid of his sciatica. In the case of asthenic neuralgia I believe the mild application of galvanism not only stimulates the weak nerve at the time, but is of a lasting character, for I have often heard a patient say that the whole limb kept warm for two or three days after. I also believe that by this more or less continuous stimulation fresh nerve-cells are caused to be formed, and so the weak nerve is permanently strengthened. And the reason that faradisation is injurious in this class of complaints is that it causes contraction of the enfeebled nerve, and if used strongly a breaking up of nerve-cells, and great pain at the time, and most likely followed by an aggravation of the symptoms. If others have been as successful as myself in the treatment of this class of complaints by galvanism, then I hope it will be tried generally, and it certainly will be a great boon to patients to have this done, instead of taking the powerful medicines some do, and after all only to ameliorate their complaint.

B. G——, aged fifty-four, a surgeon, came under treatment on June 15th, 1873. His history was that two months previous he had got wet and was obliged to sit in his damp clothes for nearly two hours. When he got home he shivered a little and felt cold all over. He went to bed, but was called up in the night and had to go to a midwifery case, at which he stayed some time. On the following day he felt much out of sorts, and in the evening had some pain

and stiffness down the back of the left thigh, which, in spite of everything he could do, gradually got worse. He then consulted a well-known physician, and he was put through all the usual modes of treatment, but with little effect; in fact, in spite of very large doses of quinine and aconite liniment, he used to get worse towards night. At the end of the fifth week the pain used to get very severe, and last for about two hours, every twelve hours. He then came to me as a last resource. He walked into my room supported by two sticks. The pain he complained of reached along the left sciatic nerve, commencing just below the sciatic notch and extending to the popliteal space; he also began to feel pain in the loins.

I looked on this case as one of great congestion of the nerve, followed by effusion under the neurilemma; and the pain in the back as caused by the disease extending upwards towards the cord. I advised him to leave off all medicines so as to give the galvanism a fair trial, and to have recourse to the latter daily. I began with eighteen cells of Stöhrer's battery. After the first application he stood up and said, "I believe this will do me good; the whole limb feels warm, which, in spite of wool, flannel, &c., it has not done for weeks." After the first week, I galvanised him only three times a week, then twice; and in three weeks he said he thought he was quite well—at any rate, he would see if he could do without the galvanism; he did so, and has been perfectly well since. He took no medicine from the day he first came, and at the end of the first week left off all the wool and flannel, and only continued his ordinary merino drawers.

E. B——, aged fifty, servant, came into the hospital on February 13th, 1875. She says except an attack of congestion of the liver five years ago, she has always had good health up to nine weeks ago, when she slept in a damp bed. A few days after she was taken with great pain in the lower part of the back and down the left hip, a few days after extending down the back of the thigh and leg to the back of the ankle-joint. The pain always gets worse at night, commencing between 7 and 8 o'clock, and particularly so in wet weather. Ordered hypodermic injection of one-sixth of a grain of morphia twice daily, and ten grains of compound colocynth pill at bedtime. Broth and milk diet.

February 16th.—No better. To go on with morphia injection, and to have a mixture containing three grains of iodide of potassium, ten grains of bicarbonate of potash, and a drachm of glycerine, to an ounce of peppermint-water.

18th.—About the same. Continue injection.

22nd.—A little better. Repeat pill, mixture, and injection.

24th.—Pain worse. Ordered a blister over sciatic nerve.

26th.—No improvement. Mixture twice daily; to be galvanised every other day.

27th.—Twelve cells from Stöhrer's continuous battery applied. Seemed to feel it a good deal.

March 2nd.—Says she certainly has less pain, and gets much better sleep since the galvanism. To leave off morphia injection.

4th.—Is better. Says the galvanism is painful at the time, but thinks it is curing her.

6th.—Is going on well. Mixture to be left off, and only ten cells to be used now. Repeat aperient pill.

9th.—Is much better. To get up to-morrow.

12th.—Pain much less. Is ordered to walk about a little.

16th.—Continues to improve; pain nearly gone. To be galvanised twice a week, and only eight cells used.

19th.—Is now convalescent; only complains of a little stiffness.

22nd.—Discharged cured. She promised to let me know if it returned; but I have heard no more of her.

E. L——, aged thirty-two, came to me on April 15th, 1874. Said he first caught cold; and after that got very weak, and then pain slowly came on in the back of the right thigh. This was about four months ago. Before he came to me he had been an out-patient. He had marks of three good-sized blisters on the back of the thigh and hip, and several small specks could be seen on the hip and thigh. These he told me were the marks of the hypodermic needle; and stated that he had had several kinds of medicine, but they had not done him any good. Of late there was always some pain and tenderness in the back of the thigh, and then at times it would get much worse and the pain would be almost unbearable. He looked very anæmic, his tongue was slightly furred and flabby, his muscles were soft and flaccid, and he said he had lost nearly a stone in weight since he was taken ill.

I galvanised him daily, commencing with sixteen cells, "which he felt very much," and dropping two each day. In eight days he was much better—in fact, so much better that he only had the battery every third day, and only eight cells. In three weeks he was quite well, and went into the country. I have seen him repeatedly since, and he has had no trouble up to the 15th November last, when he caught a severe cold and got wet; and he had, he said, suddenly found the pain return the day before his call. I applied twelve cells three times every other day, and that quite got rid of it. This is the 1st December, and he has had no return.

I believe in the first instance this case was purely of the asthenic form, from the wasting of the limb, the constant wearing pain, and the slowness with which it came on. In the second instance it was different in character; there was great tenderness along the course of the nerve, and the pain was of a more shooting character. This, then, was of the congestive form.

Mrs. L——, aged thirty-eight, came to me April 10th, 1874. She was a thin, delicate person, looked pale and weak, pulse feeble, bowels constipated, appetite bad, nights restless. She said she had had a great deal of trouble and grief during the past month, and ten days before coming to me she was taken with pain in the right side of her face, and down the neck to the clavicle; it was nearly constant, but increased at night, and each day it gained in intensity. The pain seemed very general over the whole side of the face and neck.

I applied six cells of the continuous battery, the charcoal points being covered with lint and dipped in salt and water. I applied them for twenty minutes all over the part affected, and at the end of that time she said, "Thank you; the pain is gone now." She then told me that whenever she was weaker than usual, or worried, she always had neuralgia; and she had tried medicine over and over again, and although it set her right it took days to do so; but whenever she could get the battery applied it cured her at once.

I have no doubt this was a case of asthenia of the nerve, causing pain, and at once relieved by a stimulant tonic, galvanism.

T. D——, aged thirty-one, came under treatment on the 15th Feb., 1875. This was a very chronic case, having, he said, suffered for over two years, without hardly a day's intermission. When first taken with pain in his hip and thigh he had tried a very great many kinds of treatment, and had seen a good many medical men, but for the last twelve months he had done nothing but have morphia injected night and morning, and when the weather was very wet and the pain worse, he had it done three times a day, and had got up to four grains of the acetate of morphia per day! I reduced the morphia to two grains a day, and after ten days left it off altogether, and he never returned to it regularly, but he had to be about a good deal in all weathers, and four times he had a slight relapse for a day or so, and I gave him half a grain at bedtime.

I commenced to treat him with twenty cells of the battery, and pressed it well against the thigh, and after the first week I gradually lessened the strength until I got down to eight cells. He slowly improved, and at the end of two months he was very much better, and went into the country, and that completed his cure. The treatment had not quite fair play, as the man had to go out in all weathers at five o'clock in the morning, and besides this, to keep the cold out, he took a goodish drop of whisky.

I believe in this case there was effusion into the sheath of the nerve, for there was commencing numbness down the leg and foot, and the whole limb was beginning to waste.

J. N——, aged fifty-four, came under treatment April 15th, 1875. He complained of great debility, especially in the right leg, which at times gave way under him, also of pain in the front of the thigh and all around the knee, and at times in the leg. He had heard of electricity he said, and that it would do him good, so he went and got faradised; but it increased the pain he thought, and he only had it done twice.

I commenced with six cells of the continuous current every other day, and this did him so much good I did not increase it. At the end of the second week the pain was nearly gone, and the only thing he complained of was weakness of the limb, but gradually the strength and size came back.

This seemed to me a marked case of asthenia of the nerve. And so the faradisation increased the pain by giving a shock to, and causing contraction with spasm of, the enfeebled nerves, and most likely breaking up some nerve-cells instead of causing the formation of fresh ones as the galvanism does.

Burwood-place, Hyde-park, W.

INTRACRANIAL ANEURISM.

BY WILLIAM E. HUMBLE, M.D. LOND.

I AM glad to be able so soon to forward, according to promise, an account of the termination—and, I rejoice to say, successful termination—of the case of intracranial aneurism which was published in THE LANCET of Oct. 2nd. The fact of its course having been carefully watched from the commencement, and the very interesting and distinct phenomena which attended the consolidation of the aneurism, render the case one deserving of record, and its successful issue affords encouragement for a future trial of a similar mode of treatment.

It will be recollected that the first symptoms of aneurism occurred in March, and the disease, which was at first diagnosed as a case of some kind of tumour at the base of the brain, was recognised to be aneurism at the cavernous sinus about the end of May or beginning of June.

The aneurismal bruit was first heard by the patient on the 17th of March, and by myself, by means of the stethoscope, at the above-mentioned time. The operation of ligature of the carotid having been declined by the patient, and it being found impracticable to carry out fully Mr. Tufnell's method of treatment by absolute rest and restricted diet, I determined on adopting Dr. Balfour's plan of treatment by iodide of potassium. On the 26th of June she began with nine grains of the iodide daily, and the dose was regularly increased till she took thirty-six grains daily. This treatment was steadily continued for just four months, and it is noteworthy that these large doses of the iodide (from Apothecaries' Hall) produced no appreciable symptoms whatever, the patient improving in general health and stoutness.

During the whole of this time the aneurismal bruit continued without intermission, varying in loudness somewhat according to the force of the circulation, and much resembling the sound of a cardiac valvular murmur. About the latter part of September it became louder and rougher for a week, but then subsided to its former intensity. For the last fortnight preceding its cessation I fancied it was not quite so loud, and rather softer than it had been. During the last two months the strabismus diminished, but there was more neuralgia of the brow and side of the head, and she used to complain of the pressure of the stethoscope. The improvement in her general health has been observed by all her friends.

On the morning of October 21st, I was sent for hurriedly at 9.30 A.M. She told me she had had a bad night, the aneurismal bruit having been very loud. She was taken during the night with vomiting and purging, with some headache. The vomiting was attended with much urging, and she was purged, she says, between twenty and thirty times. About 6 A.M. the aneurismal sound became different and constantly varying, at times resembling clanging wires. It then became very feeble, and she heard what resembled several cracks. She then felt very strange, and was astonished at everything appearing unusually silent, when she observed that the sound had ceased. When I saw her no bruit whatever could be heard. She was a little pale and weak, partly from the bad night, and partly because she feared some serious change for the worse had occurred. I explained to her that probably the wished-for event had occurred, and that the first step towards consolidation of the aneurism had been gained. I prescribed some medicine to stop the sickness and diarrhœa, and enjoined the greatest quietude in the recumbent posture, but with the head raised. The right side of the head was very tender, so that she complained very much of the pressure of the stethoscope. This neuralgic condition has existed more or less for some weeks.

Oct. 22nd.—Passed a tolerably good night. No return of the bruit. Says that for about an hour to-day she had slight throbbing within the head. Complains of a strange sensation in the neck and front of the chest, especially if she laughs slightly. No murmur can be heard. Right side of the head still tender, and slight noises, as the opening or shutting of a door, annoy her. Some headache. Says how strange the silence appears to her after seven months and a half of loud pulsation. Iodide to be continued in half the quantity.

24th.—Has suffered more from headache, but not severely. Says she has experienced slight throbbing on the other (left) side of the head. No bruit heard. Pulse continues rather weak, but otherwise normal. Will not remain in bed as advised. The squint has nearly disappeared.

From this time she continued to improve. The throbbing continued for a time in the left side of the head, and was explained to her to be no doubt owing to the artery on that side being enlarged to compensate for the impervious state of the diseased one. She now (Nov. 26th) continues quite well, except some neuralgia. The throbbing has ceased. No bruit has been heard since its cessation on the 21st of October, and I imagine that, five weeks having elapsed, the cure may be considered complete.

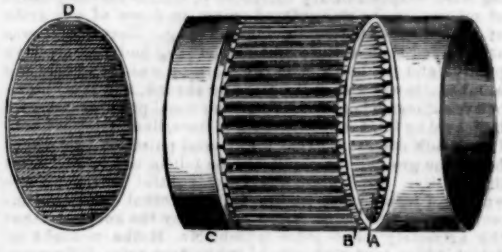
Corfe Castle, Dorset.

NOTE ON AN ETHER INHALER.

BY MARTIN OXLEY, L.K.Q.C.P.,
PHYSICIAN TO THE LIVERPOOL INFIRMARY FOR CHILDREN.

WHEN in New York this autumn, Dr. Emmett, surgeon to the State of New York Woman's Hospital, showed me an ether inhaler which is the invention of Dr. Allis. It seemed to me at first sight to be the best contrivance for the administration of ether that I had seen, and on trial I have found it quite as perfect as I expected. Its advantages are these:—The ether being very thoroughly mixed with air, the patient does not suffer from the suffocation usually felt at first inhaling; there is a large evaporating surface. A very much smaller quantity of ether is used, and less escapes into the room than with the usual mode of giving this anæsthetic; the ether can be dropped from a bottle on the distal end of the inhaler, without removing it from the face; the mask is soft and pliable, fitting accurately to the nose and mouth; and, lastly, it is of very simple construction, and cannot get out of order.

I have given the inhaler a very fair trial, and can confidently recommend it. Mr. Wood, of 81, Church-street, Liverpool, has made a few from the pattern of the one I bought in New York, and has had the framework electro-



A. Bandage. B. Frame. C. India-rubber sheeting. D. Edge of bandage.

plated. The inhaler consists of two stout oval frames which are joined together by wire bars three inches long and about one-eighth of an inch apart, making a sort of small birdcage open above and below; through these bars a bandage is

threaded, so as to fill up the inside of the cage, the edges of the bandages presenting at its open ends; over this frame is drawn a piece of stout sheet india-rubber, which has been stitched together at the edges, so as to make a covering for the frame, projecting over one end two inches, to form the mask, and at the other one inch. The ether is poured on the bandage, which forms a close, well-made artificial sponge.

Rodney-street, Liverpool.

A Mirror of HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

MIDDLESEX HOSPITAL.

CHRONIC ULCERS OF BOTH LEGS; DRY GANGRENE OF BOTH LEGS—GRADUAL IN RIGHT, SUDDEN IN LEFT.

(Under the care of Mr. HULKE.)

AN extremely interesting case of dry gangrene of both legs is at the present time in this hospital. Such a condition as that described below is, we believe, rare, if not altogether unique, in surgical practice. The explanation offered of the mechanism of the gangrene by Mr. Hulke is not only ingenious, but the only one that would account for all the facts. We shall report later on the subsequent progress of this remarkable case. For the notes of its history and progress we are indebted to Mr. G. Sherman Bigg.

The patient, an illuminator, aged thirty-three, had been in the hospital during several of the summer and early autumn months, with chronic ulcers of very old date in both legs. He was discharged on Oct. 12th, greatly benefited by the rest and the care bestowed on him, but with the ulcers incompletely cicatrised. It indeed seemed scarcely probable that they would ever completely and soundly close. After this he stayed at home a fortnight, and then went to his work—illuminating—for two days. On the third morning he noticed that the lower (the unhealed) part of the ulcer in the right leg, just above the inner ankle, was slightly discoloured. It was bluish, then greenish, and next day black. This discolouration shortly extended from the ulcer to the instep, and soon the third and fourth toes became blue, and later black and shrivelled. In this state he applied on the 23rd of November to be re-admitted. The two toes, a patch of skin on the instep half the size of the palm of the hand, and the lower half of the ulcer in the right leg were in a condition of dry gangrene. He was placed in Handel ward, and the foot and leg were wrapped in dry cotton-wool, and, as he complained of much pain, he was ordered opium in doses of one grain at intervals, regulated by his suffering. Next day it was ascertained that in the night his left leg had become very painful, and the left foot in the morning was found cold and numbed; it was also dull white and shrunk, and the cutaneous veins, instead of preventing their usual prominence, were indicated by faint, scarcely marked lines, like little channels. It was now discovered that all arterial pulsation was absent below the groins, nor could any be felt in the left external iliac artery. Mr. Hulke was very doubtful whether there was not a feeble pulse in the right external iliac, the uncertainty on this point being caused by the suspicion that the extremely faint pulse which Mr. Hulke thought he detected here might actually be in the deep epigastric artery, and this suspicion was heightened by the very conspicuous collateral distension of the communicating veins of the internal mammary and epigastric systems. This latter feature disappeared after about twenty-four hours.

In the course of some clinical remarks on the 7th inst., Mr. Hulke observed:—This is a case of gangrene beginning and slowly progressive in the right leg, and suddenly supervening in the left leg. The gangrene was dry, and dependent on arterial obstruction. The disease began in the right leg, and the hard cylindroid form of its superficial femoral artery, so far as it was accessible to touch, showed the obstruction to be due to clotting. What, then, was the origin of this? Clots, Mr. Hulke said, originate either at the place where they are found, or they have their origin in a plug or embolon, often a morsel of fibrine, brought by the blood-stream from some distant point. Was the clot in the right leg, so to speak, autochthonic or embolic in its inception? Turning to the heart, there was not any evidence of the existence of valvular disease, so that it was highly improbable that a plug should be derived from this source. Next, by listening to the abdominal aorta, this vessel could be heard to pulsate unusually forcibly for a certain distance short of its bifurcation; at this point the pulsation became very faint, and was now quite inaudible. Dr. Greenhow co-operated in ascertaining these data. The fulness of the patient's belly did not allow of an absolute decision, but the conviction was very strong that the inaudibility of the pulsation here was not due to the presence of any tumour or other extraneous mass overlying the vessel, but to its actual cessation. The origin of the clotting had, then, to be sought in the limb itself. The two chief factors on which the fluidity of the blood depends are, they were aware, the constant motion imparted to it by the heart, and the healthiness—in particular the smoothness—of the vessels through which it circulates. The most common disorder which roughens the inner surface of the arterial tubes is chronic deformitive endarteritis, a process exactly corresponding in the textural alterations it induces to endocarditis. Chronic endarteritis is, however, usually a widely diffused disorder, and as the arteries of the upper extremities and those of the head bore no traces of its presence, both Dr. Greenhow and Mr. Hulke felt compelled to exclude it from consideration. This narrowed down the field of inquiry to the part where the gangrene first showed itself—the lower end of the chronic ulcer. This first, it will be remembered, became bluish-green, then black—in short, gangrenous. He thought it most likely that some of the smallest vessels, bordering on the ulcer, first were obstructed, whether from textural changes induced in them by the proximity of the ulcerative process, or whether some of them gave way and the occluding clot which sealed them passed inwards along their lumen, is of little moment. Once begun, the clot extended peripherally, blocking the arterial twigs supplying the skin of the instep, and later those distributed to the toes, killing those parts and it extended also centripetally, rising through the tibial arteries, through the superficial and common femoral arteries, the external and common iliac arteries, till it projected into the lowest part of the abdominal aorta; there its tapering apex, encountering the downward rush of blood in the main trunk, was swept off by it, plugging suddenly the left iliac or one of its main divisions, when, the obstruction being complete on both sides, the clot grew upwards for a certain height into the aorta itself.

What, Mr. Hulke asked, is the probable forecast in such a case? Though very grave, the man's condition was not hopeless. The gangrene was still slowly spreading, but he judged that it would not ascend above the knees. By using dry dressings desiccation of the mortified parts would be arrested, and by that means the fetor would be kept down and the amount of infective putrid diffusible substances in the limb lessened, and with this the risks of a fatal septicæmia would be diminished. Oakum and charcoal were very useful for this.

In discussing the question of amputation, Mr. Hulke remarked that to do so now, before the eventual limits of the gangrene were known, would be to court gangrene of the stump, necessitating, if the man rallied from the double operation, a second amputation nearer the trunk. Even should a line of demarcation form, the safer plan would be to simply cut through the dead parts, and leave an inch or so of them to be spontaneously thrown off. Such stumps would of course be conical, but later the soft parts could be pushed back and a piece of bone removed if necessary. A not very small experience of gangrene from frostbite gathered in the Crimean campaign, and the unfortunate results of amputation in dry gangrene of limbs in typhoid fever, had taught

him that a cautious expectant treatment was safer for the patient than early operative measures in gangrene dependent on arterial obstruction.

Dec. 7th.—His temperature, which since his admittance has varied between 98·8° to 99·6°, has risen to 100·2°. His pulse averages about the same—116. His feet are both becoming darker, although the pulsation is rather stronger, especially on the right side, than previously. He still requires six opium pills a day (one grain each) to keep him free from pain.

9th.—Complains of sore throat, which is somewhat relaxed. Ordered chlorate of potash gargle. The line of demarcation on the right foot is beginning to show itself above.

11th.—The left foot is losing its dark colour and assuming one of a more pinkish hue; the right foot is also improving, but the line of separation above is more marked. His temperature is 101·4°.

13th.—The line of separation daily becomes more conspicuous on the right leg. The two toes, which were black, are still quite firm, and do not show any signs of separating. The left foot is beginning to assume a more natural colour. The pulsation in the right groin is very much stronger, but does not extend below the groin; on the left side the pulsation is not so marked, but is stronger than when the patient was admitted; it also cannot be felt below the groin. Sore throat is now quite relieved. Last night and this morning his temperature has been for the first time normal. Patient states that he feels better and much improved in general health. The thighs are warm.

MOORFIELDS OPHTHALMIC HOSPITAL.

(Cases under the care of Mr. HUTCHINSON.)

SYPHILITIC KERATITIS AT AN UNUSUALLY EARLY AGE.

AMONGST the patients at Moorfields on Monday morning, December 13th, 1875, was a child aged three, who was suffering from well-marked and symmetrical interstitial keratitis of about a month's (?) duration. The child looked healthy, and had a good set of milk teeth, but there was the history that it had been treated at St. Bartholomew's Hospital in infancy for a long-continued rash and severe snuffles, and that it was then not expected to live. Mr. Hutchinson remarked that the interest of the case was in the unusually early age at which the keratitis occurred. There could, he said, be no doubt, from its character, that it was due to inherited syphilis, but he did not recollect ever to have identified this form of eye disease in so young a patient; he had several times seen it at five years old, but as a rule it did not occur till from eight to ten, and was yet more frequent about the time of puberty; it might even be delayed to the age of thirty or thirty-five, and then develop in a most characteristic manner. He was not prepared at present to give any explanation of this wide difference of range.

SUPPURATION OF THE LACHRYMAL SACS IN INFANTS.

A child of three years old was brought on account of discharge of matter from the eyes. The mother stated that her doctor discovered within a few days of the child's birth that matter came from the corners of its eyes, and that this had persisted ever since. There had never been any inflammation of any part. On pressure over the lachrymal sac pus regurgitated freely through the canaliculi. Mr. Hutchinson remarked that he had seen but one similar case; in that instance he was consulted by a surgeon in the case of his own child, an infant of a few days old, which had suppuration of both lachrymal sacs. There was no redness or evidence of inflammation. Pressure over the sac caused a free escape of puro-mucus. On account of the delicacy of the parts it was thought better, for a time at least, to abstain from mechanical treatment; and in the course of a few weeks, under the use of an astringent lotion, it entirely ceased. It was very difficult to form any conjecture as to the cause of the symptom in these two cases. Both the children were quite healthy; in both it occurred so immediately after birth that it was difficult to suspect any exposure to cold, and in both it occurred on each side, making the action of any accidental cause improbable.

STANLEY HOSPITAL, LIVERPOOL.

SUCCESSFUL CASE OF HERNIOTOMY; REDUCTION OF LARGE MASSES OF OMENTUM.

(Under the care of Mr. RUSHTON PARKER.)

Old omental hernia; strangulation of ileum; sac congenital.—A labourer, aged fifty-two, had had for two years a reducible left inguinal hernia, which he kept up easily with a truss. For about thirty years he had had an irreducible right inguinal hernia, for which he had never worn a truss, and which increased in size at times, the increase having always disappeared when he lay down.

On the 1st April, 1875, this additional portion came down soon after mid-day, when he had eaten an unusually hearty dinner, and he could not reduce it. For two days he remained at home, unable to work, or eat, or rest, and he came to the hospital on 3rd April among the out-patients.

On admission he had a large three-lobed tumour of the right scrotum, the smallest lobe being in front and having the size and shape of a testicle, but feeling as if it contained fluid. No translucency, however, could be detected in any part of the swelling, which also was everywhere dull on percussion. There was pain in the abdomen, which was tense, but not enlarged, and he appeared thoroughly uncomfortable and rather restless, though not anxious or seriously distressed. The pulse was not perceptibly abnormal, and there was an entire absence of vomiting. An occasional eructation, however, gave a clear warning of impending strangulation of an obstructed hernia.

He was put to bed with the pelvis raised and knees flexed, and had a quarter of a grain of morphia subcutaneously every four hours, after a reasonable trial of taxis, which failed. Three or four hours later he vomited a glass of brandy-and-water which had been given him, and twelve hours after admission regular stercoraceous vomiting set in and lasted at moderate intervals for six hours more, when he was put under chloroform.

The operation was performed fifteen hours after the first act of vomiting, six hours after the first appearance of stercoraceous matter, and exactly three days after the descent of the hernia. A vertical incision was made down to the external oblique muscle, and an attempt made to reduce the hernia without opening the sac, by first incising the edge of the external ring, but this failed. The sac was opened, and a piece of small intestine was found extending down into mid-scrotum. A narrow neck was found at least two inches below the external ring, much less than half an inch wide. This was incised, and a couple of inches of gut, slightly reddened but uninjured, was liberated, and returned with the portion above into the abdomen, constantly irrigated, after exposure, with 1 per cent. carbolic lotion (the spray apparatus not being at hand). About three-quarters of a pound of omentum was next pulled from the scrotum, passing through the narrow neck by a still narrower pedicle, and being found quite healthy was returned into the abdomen, after being well washed with the carbolic lotion. Much fluid escaped with the release of the omentum, which was found to occupy a congenital sac, the small diverticulum of which was stripped up and cut off.

The inguinal neck of the sac was sown up with carbolised catgut, and carbolised waxed silk sutures were used for the external wound.

The abdominal part of the wound healed without suppuration, but pus formed in the scrotum by the fourth or fifth day. The man was up wearing a double truss in five weeks. In spite of the continual administration of morphia or opium, he had stools each day after the operation for several days, but, fortunately, without harm. He vomited twice after the operation on the same day; and on the fourth day was much distressed by hiccough for many hours, but this disappeared at once on his following an old popular plan of slowly sipping some liquid (milk in this case) as long as he could without breathing.

BEQUESTS, &c., TO MEDICAL CHARITIES.—Mr. Frederick Sheppard bequeathed £1000 to the Seaside Convalescent Hospital, Seaford, and £300 to the Chelsea Hospital for Women. Mrs. Johnson bequeathed £500 to the Chesham Hospital.

Medical Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

THE ordinary meeting of this Society was held on the 14th inst., Sir James Paget, F.R.S., President, occupying the chair. There was a very large attendance, and the whole evening was occupied by the question of the operation of abdominal section for the relief of intussusception, which was raised in three communications by Mr. Howard Marsh, Dr. Fagge and Mr. Howse, and Mr. Hutchinson. In the discussion that followed it was evident that there was a prevalent opinion as to the advisability of the operation in cases where other means of reduction failed; and, although it was somewhat lost sight of in the debate, it must not be forgotten that it is to Mr. Hutchinson that is owing the introduction of this new method of successfully treating cases which, if left alone, would inevitably terminate fatally. Sir James Paget but expressed the whole feeling of the meeting when he said that this operation was destined to become as prevalent and as valuable as ovariotomy.

The first paper read was that contributed by Mr. HOWARD MARSH on a "Case in which Abdominal Section was successfully performed for Intussusception in an Infant seven months old." The child, a patient of Dr. Miller and Dr. Barnes, of Eye, in Suffolk, was attacked on the 29th of last March with symptoms apparently of dysenteric diarrhœa—sickness, griping abdominal pains, and too frequent action of the bowels. This condition was for a time relieved by medicine, but in two or three days it recurred, and was then accompanied with tenesmus and the passage of blood and slimy mucus. The child remained about the same, but with no serious disturbance of the general health, till the morning of April 11th, when the whole complexion of the attack suddenly changed: the pain became very severe, sickness frequent, tenesmus violent and almost constant, and he grew pale and restless. Dr. Barnes found the bowel projecting two inches beyond the anus, and could see the ileo-cæcal valve at the extremity of the protrusion, while in the abdomen a firm cylindrical tumour was felt extending in the course of the descending colon from the left of the umbilicus to the left iliac fossa. Insufflation and the careful distension of the large intestine with lukewarm water failed to reduce the intussusception. When the child was seen late in the evening he was in a state of collapse, with a frequent and feeble pulse; he was, moreover, pale, and frequently sick. It was then decided to perform abdominal section. Accordingly, chloroform having been administered, Mr. Marsh proceeded to open the abdomen to the extent of two inches in the middle line, just below the umbilicus. Great care was required to avoid wounding the intestine, which protruded into the wound. Failing to reduce the intussusception by the introduction of two fingers into the abdomen, the bowel was first withdrawn from the abdominal cavity; reduction was then easily effected. It was difficult to estimate the precise amount of bowel invaginated, but it comprised at least one-half of the colon and an equal part of the small intestine. The only difficulty in the operation consisted in the return of the considerable amount of intestine that now lay on the surface of the abdomen, but this was accomplished without any great delay, and the wound was closed with harelip pins and superficial sutures, being further supported by strapping and a bandage. Small doses of laudanum were given, and milk and water with occasional addition of brandy. No bad symptoms followed. Sickness ceased at once after the operation; flatus was passed on the next, and a feculent motion on the third day; the sutures were removed at the end of eighty-four hours, and the child was convalescent on the fourth day. Mr. Marsh remarked that the interest of the case was increased if it be read in connexion with Mr. Hutchinson's paper on the same subject, published in the 57th volume of the Medico-Chirurgical Transactions, for it confirms in a striking manner that writer's observation that in many cases of intussusception the volvulus is neither inflamed, adherent, nor strangulated, but is like a piece of intestine lying loose in a hernial sac, and admitting of being easily reduced by an appropriate slight force. In the present case it seems almost certain that the intestine was for thirteen days merely invaginated, and that inflammation, with all its attendant dangers, set in only twelve or fourteen hours before the operation. Mr. Hutchinson in his paper expressed his anticipation that abdominal section would be less likely to succeed in very young children. This, however, to judge from the present instance, is not the case. Mr. Marsh concluded by referring to the necessity for the careful consideration of any particular case before the operation is performed; but he thought it should be undertaken, if all other means had failed—(1) in acute cases of not more than twelve or eighteen hours' duration; and (2) in chronic cases, in which there had been no symptoms of inflammation or strangulation of the intestine.

The second paper was contributed by Dr. HILTON FAGGE and Mr. H. G. HOWSE. It dealt with a "Case of Intussusception in an Adult, without symptoms of Strangulation, treated successfully by Abdominal Section." The case recorded in the paper was that of a woman, aged thirty-three, whom Dr. Fagge was called to see in consultation with Dr. Adcock, of Abbey-street, on June 28th, 1874. She had been suffering for fifteen days from paroxysmal pain in the abdomen, and after she had complained of this for eight days, Dr. Adcock had observed a tumour which was at first situated in the right iliac fossa, but which afterwards moved over to the left iliac fossa. She had had a little sickness, but no decided constipation. The tongue was clean, the pulse was scarcely above the natural rate. From the character of the tumour it was diagnosed as an intussusception, and inflation of the rectum was practised the same day, but with no result. On June 29th Mr. Howse was called in, and the bowel was again inflated with better instruments. This gave intense pain, but had the effect of altering the position of the tumour, which now lay behind the umbilicus. On June 30th inflation was practised for the third time, without producing any change in the tumour. On July 1st the condition of the patient was the same. She had had a slight return of the sickness in the morning, and a little pain; her bowels had not been open since the first inflation; the tumour was still to be felt. Another consultation was held, and, having obtained the consent of the patient and her husband, Mr. Howse proceeded to open the abdomen by a vertical incision opposite the umbilicus. The intussuscepted mass was readily felt, and as it could not be reduced *in situ*, it was drawn out of the wound. Even then pulling at the ends failed, and it was only by a kind of kneading movement, with pressure upon the distal end, that reduction was effected; and it was particularly noticed that there was a little hitch just when the last part of the invaginated mass was emerging. The length of the included bowel was at least eighteen inches. All the precautions of the antiseptic method were employed during the operation and in the after-treatment, and special care was taken to prevent any considerable quantity of carbolic lotion from flowing into the peritoneal cavity. She recovered without a bad symptom, the temperature never rising above normal, and the wound healing by the first intention. At the present time she is well, and expecting her confinement. In this case hæmorrhage from the bowels was absent, which has hitherto been regarded as a cardinal symptom of intussusception. In their remarks the authors showed that it was of great importance not to delay the operation of abdominal section until hæmorrhage occurred. The significance of this symptom had hitherto been misunderstood. It had been supposed by some writers, including Dr. Fagge, to indicate the commencement of the processes which lead to the sloughing and detachment of the invaginated part of the bowel. The authors now pointed out that this is a mistake, but they also showed that it often is evidence of extreme congestion and swelling of this part—a condition which may destroy the patient's life in a few days, and which may render the operation of abdominal section a failure by making it impossible to reduce the intussusception when the abdominal cavity has been opened.

The third paper was by Mr. JONATHAN HUTCHINSON. It

was entitled "A Second Case of Abdominal Section for Intussusception into the Colon; with Remarks on the Details of the Operation." It consisted of the narration of a fatal case of operation for intussusception in an infant, aged six months, whom he had attended in consultation with Dr. Madge. The intussusception involved the whole length of the colon, and the ileo-cæcal valve, introverted, constituted its extremity, and was easily felt by the finger in the anus. The symptoms had been the usual ones; they had lasted three days, and the usual method of treatment, perseveringly carried out, had failed. As the child was evidently about to sink, the operation was at once performed. Considerable difficulties were encountered in effecting the reduction of the intussuscepted part. Its neck was tied back in the loin by the meso-colon, and could not be brought into view, and, although there were no adhesions, it was found quite impracticable to draw the intussuscepted bowel out of the sheath. At length it was discovereed that although the upper end of the intussusception was fixed, its lower one, containing the sigmoid flexure of the colon, was quite loose. This was readily brought out, and by gently pulling the sheath downwards reduction was without difficulty effected. The appearance of the appendix vermiformis, just at the completion of the reduction, confirmed the opinion formed as to the introversion having begun at the cæcum. Considerable difficulty was encountered in replacing the intestines within the abdomen. They were accordingly punctured with a harelip needle in two or three places, and at the conclusion of the operation the infant was in an alarming collapse. It rallied, however, afterwards, took the breast, and passed a motion. Death occurred about six hours after the operation, and the post-mortem showed evidences of recent extensive peritonitis. In connexion with the fact that the child's sister had died at the same age a year ago with a precisely similar condition of things, it was of interest to note that the cæcum appeared to be quite loose, possessing a mesentery, which allowed of its very free displacement. The author suggested that this condition as a congenital peculiarity is probably the one which admits of displacement of this special part. He stated also that one of his chief objects in bringing the case before the Society was to suggest, for the guidance of future operations, the propriety of always seeking first the lower end of the intussusception. He believed it would generally be found much easier to bring the lower end into the wound without allowing escape of the rest of the intestines. He thought it probable also that it would usually be found much easier (as it was in this instance) to effect reduction by drawing the sheath downwards from off its contents, than by drawing the contents upwards from within the sheath. The difficulty in reducing by traction results from the fact that the sheath becomes puckered up into rings, which act as so many strictures upon its contents. He thought it even possible that, by attention to this rule, reduction might sometimes be effected without bringing the parts externally.

Dr. BUZZARD opened the discussion. He said that he would keep strictly to the point as to the advisability of the operation. Dr. Brinton had pointed out that out of 600 cases of intestinal obstruction, forty-three per cent. were due to intussusception; and of the cases of intussusception thirty to forty per cent. terminated favourably. Thus Brinton, in considering the question of gastrotomy, found himself compelled to eliminate intussusception, the operation being only of value in the early stages of the affection, when the condition was not one of obstruction, but of enteritis. Dr. Buzzard said that he would be inclined to place the proportion of reducible intussusception quite as high as Brinton did, and he inquired whether a dangerous operation was justified in a disease of which the proportion of cases capable of relief by other means is so high?—Mr. MAUNDER related two cases of intussusception in infants, one in which reduction was effected by inflation and injection of water; and the other where, although the ileo-cæcal valve presented at the anus, there was spontaneous reduction. He characterised the papers of the evening as indicative of new triumphs in modern surgery, and drew attention to the points insisted on by the authors.—Dr. WEST thought a distinction should be drawn between intussusception in the adult and in the child. In the latter the diagnosis is not difficult, and one of the earliest signs is the passage of blood or blood-stained mucus. It had seemed to him that this depended on the position of the intussusception, and took place from the constricted and congested bowel. The diagnosis was not difficult, even in cases where the invaginated intestine could not be felt, and where there was only indistinct fulness of the abdomen. A certain proportion of these cases—not so many as Dr. Brinton had stated—recovered independently of treatment, or under simply soothing applications. Others, again, only yielded under inflation or injection; experiments, however, which should not be pushed beyond reasonable limits, remembering the susceptibility of the nervous system in childhood. It was a question, indeed, how far the nervous system of the child could bear the shock of an operation. Dr. West concluded by saying that when every other means had failed in producing reduction, surgery must be had recourse to, and the cases related gave every hope of success. The changed light in which abdominal surgery was now regarded was interesting to one who contrasted the present views with those held twenty-five years ago, and we had learnt from ovariotomy that long incisions into the peritoneal cavity might be made with impunity.—Dr. E. G. BARNES, in whose practice occurred the case related by Mr. Marsh, said that the child was now perfectly well, and the cicatrix in the abdominal wall was quite firm. It was important to note the difference between intussusception in the child and in the adult; and between those cases where the invagination took place at the ileo-cæcal valve, and those of the small intestine, which occurred after sloughing. The diagnosis of intussusception was not more uncertain than that of any other internal disease—e.g., pneumonia or pleurisy. That length of time during which the intussusception had lasted was not, as supposed, sufficient to render the case a hopeless one, from the fear that adhesions might have been set up, was, he thought, shown by Mr. Marsh's case. In two cases which he had examined after death—one in which the invagination had lasted three days,—it was comparatively easy to reduce the intussusception. Granting, then, that the diagnosis is certain and the case not hopeless, it is imperative to have recourse to operative interference if other means have failed in effecting reduction. Injections, together with insufflation, should always be tried.—Mr. T. SMITH drew attention to the significance of hæmorrhage, which could not occur if there were complete strangulation. He did not think the size of the incision of much moment, since, if we have learnt anything from ovariotomy, it is that mechanical interference with the peritoneum is not an element of great danger. The danger in such cases lay in the retention of a little blood or pus in the peritoneal cavity, and all the viscera could be sponged with impunity. The length of the incision would probably facilitate the operation, the only difficulty thus produced being in the return of the bowel. It would be often necessary to puncture the intestine with a fine trocar or needle. In reply to Dr. Buzzard, Mr. Smith said that surgical interference would not be had recourse to unless other means had failed. He did not think any value could be placed on Dr. Brinton's statistics, and he believed that were Dr. Brinton now living, he would have found reason to alter his opinion on this head.—Mr. HOLMES thought that a long incision would facilitate the return of the bowel. He had only once performed abdominal section (for intestinal obstruction), and although the incision was a free one, he had no difficulty in returning the gut into the cavity. He agreed with Mr. Smith as to the inutility of making any deductions from alleged cases of recovery. It should be remembered that those cases in which an operation was deemed necessary were mostly cases which, if left alone, would probably not recover. With regard to hæmorrhage, he thought the occurrence of blood in a hernial sac was evidence that bleeding could take place from strangulated intestine. The three cases under review were different: in Mr. Marsh's and Mr. Hutchinson's cases it was evident that unless relieved their condition was hopeless, but it was impossible to say if this were so in Dr. Fagge's case.—Mr. GEORGE POLLOCK thought the hints contained in the paper by Dr. Fagge and Mr. Howse, as to the danger of over-distension by injection, were of great importance. Some years ago he had made some experiments on this point, and found that when the bowel was but slightly distended the peritoneum was very apt to crack. This rupture of the peritoneal coat might be the cause of peritonitis.—Dr. HARE

pointed out that the cases could be grouped under two categories—one in which the bowel was constricted, the other in which it was strangulated. In the former class there was great congestion of the intussuscepted portion, for the reflux of blood by the veins was cut off, but the arteries still remained patent. He urged the injection of *ice-cold* water to reduce this congested state. He had in analogous cases succeeded by this means, aided by application of ice to the abdomen. Not only did cold act by emptying the congested vessels, but also by diminishing the volume of air in the bowel.—The PRESIDENT, in calling upon the authors to reply, said that the papers were of great value, opening up a large field of abdominal operation, which he believed would be as fruitful in result as ovariotomy was. He could remember when the value and expediency of ovariotomy had been called in question at this Society.—Mr. MARSH said that the question really was, what degree of risk is incurred in the operation of abdominal section *per se*? Was it more than in any other capital operation? Certainly the history of ovariotomy had shown with how great impunity the abdomen might be laid open, and the power of resistance to such ordeal was exhibited in cases where the operation had been accompanied by pregnancy. The favourable results of ovariotomy, as contrasted with those obtained in the earlier days of the operation, were largely owing to the increased care taken to remove all septic fluids from the peritoneum. He concluded then that abdominal section was not a dangerous operation. As to the selection of cases of intussusception, he thought acute cases of twelve or eighteen hours' duration might be operated on, and he related a fatal case of obstruction, due to internal strangulation, with symptoms of eight days' duration, and the patient did not come into hospital until the time for successful operation had passed.—Dr. HILTON FAGGE said that the point which he and Mr. Howse had wanted to show in their paper was that the occurrence of hæmorrhage indicated a change in the bowel—an increasing congestion,—and therefore the greater danger of deferring operation. If that condition could be anticipated, the bowel could be more easily reduced at the time of operation. In the present case Dr. Fagge stated that in determining on the operation he was no doubt influenced by a case which he had seen in which no hæmorrhage occurred, and no operation was undertaken; that case terminated fatally. With regard to statistical facts, he said that no one more carefully collected his cases than Dr. Brinton, but it must be remembered that a large number of cases of intussusception were not diagnosed until the invaginated segment sloughed and was passed per anum.—Mr. HOWSE referred to the advisability of puncturing the intestine, which, owing to the great difficulty experienced in returning the bowel, was often found to be necessary. In two cases he had punctured the intestine with a fine trocar and canula, but had found that, owing probably to the inflamed state of the bowel, and consequent paralysis of the muscular coat, the punctures did not close, and a gradual oozing of fæces took place, leading to fatal peritonitis. This seemed to have occurred in Mr. Hutchinson's case. In one case he had tried to sew up the small aperture, but found this very difficult from the softened condition of the serous coat. He thought in such cases it might even be wiser to make a free incision into the intestine, and then sew the margins of the wound together. The hæmorrhage in intussusception probably took place in the first stage of strangulation, before that was complete; and he did not think the analogy of bleeding into a hernial sac held good as evidence that hæmorrhage took place from a strangulated bowel; for it must be remembered that in hernia the sac itself might be the source of the hæmorrhage, especially as most blood was found in cases where taxis had been much applied.—Mr. HUTCHINSON said that much light would be gained if statistics were compiled of cases of intussusception of the colon where the cæcum appeared at the anus, and the characteristic sausage-like mass could be felt in the iliac fossa. Before his first case all such cases he had seen had ended fatally. With regard to the operation, he was not inclined to regard the length of the incision as unimportant. There was no analogy with ovariotomy, where one had to deal with flaccid abdominal walls after the removal of a large tumour. In intussusception, on the other hand, all the contents of the abdomen that were extruded had to be replaced, and this replacement was difficult just in proportion to the length of the incision and the amount of prolapsed bowel. He had sometimes to reduce the size of an incision before he could replace the intestines. The present was the only case in which he had punctured the intestine, and he hoped never to do it again. It was to this puncture that he attributed the fatal issue.

The meeting then adjourned.

CLINICAL SOCIETY OF LONDON.

THE ordinary meeting of the Society was held on Dec. 10th, Dr. BUZZARD in the chair. Some very remarkable cases of cures of diabetes by skim-milk were brought forward by Dr. Donkin, and Mr. Haward narrated a case of bold and somewhat novel treatment of lymphadenoma, which elicited an interesting discussion. There was a very fair attendance of members of the Society, although not so good as usual. The election of Sir Thomas Watson, Bart., and Dr. C. J. B. Williams, as honorary members of the Society, was announced.

Dr. SCOTT DONKIN brought forward a case of Diabetes cured by the use of skim-milk. The patient, who was shown to the Society, was a hale, robust-looking man, forty-five years of age, a carman by trade. He had an accident three years ago, suffering a blow on the head, which laid him up for a while. At the end of June, 1875, he had another accident: his cart coming into collision with a cab, he fell between the shafts, and was dragged some distance and bruised, but not severely injured. Soon afterwards he began to suffer from polyuria, with great debility and much thirst, but the practitioner whom he consulted did not recognise the case as one of diabetes, and sent him into the country for change of air. There, on an unrestricted diet, he grew rapidly worse, and, as the existence of diabetes was suspected, he was sent back to London. On Oct. 6th he was first seen by Dr. Donkin, having then suffered from these symptoms for six weeks. At that time he was passing daily from twelve to fourteen pints of urine, of sp. gr. 1045, containing a quantity of sugar, which was estimated, by means of Dubosecq's polarising saccharometer, at twenty-eight grains to the ounce. There was urgent thirst, a parched mouth, dry skin, and great voracity, and the sight was impaired. There was loss of sleep from the frequent calls to micturate at night, great debility, and loss of flesh, but no other complications. The patient was at once (on Oct. 7th) put on skim-milk diet, seven pints a day, without other food. Two days later the quantity of milk was increased to eight pints a day. The treatment was followed by a rapid diminution in the quantity of urine, and on the fifth day from its commencement only four pints and a half of urine were passed. On Oct. 14th, or seven days from the commencement, the specific gravity of the urine was 1010, and there was no sugar to be discovered in it. The health had greatly improved, the patient slept well, having no calls to pass urine at night. Nine pints of milk were now allowed per diem, a part being given as curd. On Nov. 5th three-quarters of a pound of mutton chop was added to the diet, the skim-milk being reduced to six pints. On the 12th the specific gravity of the urine was 1012, and he was allowed an additional chop. On Nov. 18th, or six weeks from the commencement of the treatment, the patient's health was restored and there was no sugar in the urine, and he was allowed some fish. On the 21st he resumed his occupation, which he has since continued. On Dec. 3rd he was seen again; he came then free from disease. On the 10th his urine was of sp. gr. 1017; no sugar could be discovered with Fehling's solution, and the quantity was from four pints to four pints and a half per diem. He was now allowed some tea and a little pale brandy. In remarking on the case, Dr. Donkin observed that some might be inclined to regard it as one of traumatic origin, but this was not his opinion. The great quantity of sugar passed and the rapid emaciation showed the case to be a very severe one. It was a fact of great importance that the copious formation of sugar was arrested under a diet which contained eight ounces of milk sugar per diem, that being the esti-

mated quantity in the amount of milk taken, and it corroborated the observation which he had previously made, that lactose does not cause an increase in diabetic sugar. Dr. Donkin also gave some particulars of another case under his care—a young lady ten years of age, who for three months had been suffering from great thirst and frequent micturition. The practitioner who was consulted found the case to be one of diabetes. The specific gravity of the urine was 1040, and it contained much sugar. He ordered a meat diet and small quantities of Dover's powder. She still, however, suffered from thirst and occasional giddiness, and on Oct. 2nd she was put on a diet of skim-milk, which she continued for ten days. This was followed by a rapid fall in the specific gravity of the urine, which reached 1010 on October 12th, when she came to London to consult Dr. Donkin. The same treatment was continued, and on November 6th she was seen by Sir T. Watson, who stated that the specific gravity of the urine was 1015, and it contained neither sugar nor albumen. Since that time the patient had continued well, and on December 6th the specific gravity of the urine, which had varied from 1014 to 1016, was 1023 (the quantity of urine being less than usual); the child was in good health and spirits, and the diet was being gradually altered towards an ordinary one. Dr. Donkin remarked that these cases show in a striking way the arrest of the disease by the treatment when it is applied in the early stages, before the disease has been fully established or has produced irremediable lesions. The fact that the method was so often applied only as a last resource, when all other measures have failed, must be borne in mind in estimating the value of the treatment; this was especially the case with hospital patients, who so often only apply for relief when broken down and worn out by the disease, and hence the frequent failure to obtain any successful result.—Dr. COUPLAND inquired whether the patient was of temperate habits, or was in the habit of taking malt liquors.—Dr. DONKIN replied that he was very temperate and moderate.—Dr. GLOVER suggested that the urine should be examined by the secretaries in order that confirmation might be given to the remarkable facts of the case. One very striking fact in the history of the case was that the patient had actually, as he had ascertained by questioning him, lived solely on skim milk for a month. Moreover, he was restored to perfect health. Now if any other remedy were introduced which produced half so remarkable effects, we should think it a very important addition to the pharmacopœia. The second case was even more astonishing, as the disease in old people may often be held in check for a long time by careful dieting, but in early life they were usually much less amenable to treatment.—At the suggestion of the chairman, Dr. Glover and Dr. Southey made an examination of the urine, and reported that it was entirely free from sugar.

Mr. WARRINGTON HAWARD read the notes of a case of Lymphadenoma. The patient was a little girl, four years of age, who came under his care at the Children's Hospital. When first seen, there was a mass of enlarged glands on the left side of the neck, occupying the anterior and posterior triangles, and nearly reaching the middle line; it measured four and a half inches vertically and six inches transversely, and was most prominent at the upper part. The mass was firm, freely movable beneath the skin; the superficial veins prominent; the skin natural. There were no enlarged glands elsewhere; the liver and spleen were not enlarged; and there was no increase in the white corpuscles of the blood. The temperature was normal. The child's parents were healthy, but two relatives had died of phthisis. The child had had measles and small-pox, the latter a year previously; and soon after a gland behind the left ear began to enlarge; this was followed by others lower down in the neck. Then loss of flesh began, but no other glands enlarged till shortly before admission to the hospital, when she was pale and thin, but intelligent and cheerful. Mr. Haward determined to remove the gland in order to avoid, if possible, any further infection of the system. This was done on July 10th; the anterior triangle of the neck was exposed, and the enlarged glands shelled out, the carotid sheath being exposed during the operation. The wound was dressed with antiseptics. On the following day the temperature was 101°; pulse 100. The patient had slept well. There was a rapid subsidence of the traumatic fever, and on July 29th the wound was almost closed. On the 30th the glands were removed in a similar manner from the posterior triangle of the neck, the wound being treated as before. The febrile reaction was much greater than before, but the wound did well, and by the end of August was nearly cured, and the child left on August 30th much improved in every way. On October 9th she was again admitted with slightly enlarged glands at the angle of the jaw, and on November 5th there were growths in the axilla and some also in the mediastinum. There was rapid emaciation and great pallor, and the temperature rose to 102° every evening. The glands rapidly increased in size, masses appearing on each side of the neck, in the axilla, and in the right groin. There was great emaciation, no diarrhœa, but slight cough, and the evening temperature was about 103°, that in the morning about 98°. She gradually became weaker, and died on Nov. 14th. At the post-mortem masses of enlarged glands were found in the neck, the axilla, groins, and anterior mediastinum; the lungs contained numerous grey semi-transparent granulations; the liver, spleen, and peritoneum also contained numerous small nodules of adenoid growth. Mr. Haward said that when Hodgkin first described the disease, he stated that there was no treatment of any value, and this was still the case after the lapse of forty years. It seemed to him, therefore, that when the earlier growths were in a readily accessible situation, we might, by early removal, prevent the occurrence of general infection. Cases were sometimes fatal even before this occurred, as in a case to which he referred, where death was caused by pressure on the œsophagus. In this child the disease was confined to one side of the neck for a year, and a remarkable alteration ensued on the operation. No return had occurred in the posterior triangle—a fact which Mr. Haward attributed to the more complete removal possible. At any rate, it was justifiable to attempt operation in so serious a disease, if there were any chance of arresting it.—Dr. DOUGLAS POWELL remarked that his own feeling with regard to this novel method of treatment was one of doubt, and he should differ from Mr. Haward with respect to the prospect of its being of any use. He was strongly of opinion that the glandular enlargements were of constitutional origin, and that the situation of the enlargement was more the result of accident than of anything else. Probably the explanation of the frequency of scrofulous enlargement of the glands in the neck was to be found in the frequent irritations about the head in children, but these only acted as determining causes. And he should fear that such an operation as that described would tend to set up further irritation in other glands.—Dr. SOUTHEY inquired whether any nervous symptoms had been observed during life, to which Mr. Haward replied in the negative.—Mr. T. NORTON said that he had removed similar masses from the neck, but he was inclined to believe them to be of constitutional origin, and they might be reduced by treatment. He would not operate if the enlarged glands passed more deeply.—Dr. SILVER observed that Mr. Norton was speaking of a disease of an entirely different nature. He wished to mention the case of a woman who had recently been under his care, who had a mass of enlarged glands in the left side of the neck, over which the skin was freely movable. There was also evidence of masses in the mediastinum and of enlargement of the spleen. In that case there were certain clinical features of interest, one of the most characteristic of which was a great variation of temperature. Another point was that the red blood-corpuscles were not numerous, and they exhibited a tendency to run together into masses, and not into rouleaux; the blood also contained masses of granules, apparently of a fatty nature.—Dr. GREENFIELD had also observed in two cases a very remarkable condition of the temperature, which rose very rapidly to 105·5° or 106°, falling again with equal rapidity. These attacks of rise of temperature were sometimes attended with slight shivering, and sometimes with slight discoloration of the skin. They were so transient that they would probably not be observed if the temperature were taken only in the morning and evening. He inquired whether Mr. Haward had observed clusters of small red spheroidal corpuscles in the blood, such as had been described by the name of microcythæmia, which he had found in the blood in one such case. He was inclined to believe, with Mr. Haward, that the disease was an essentially malignant one, and that although histologically the growth in the glands, and in the liver, spleen, &c., might be indistinguishable from that occurring in other forms of overgrowth or new formation of

adenoid tissue, yet that in its life history and mode of growth and invasion it exhibited a distinctly malignant type. He adverted also to the inconvenience and confusion which resulted from grouping together and applying the names of lymphoma, lymphadenoma, &c., to diseases so different as simple overgrowth of the glands, new formation of adenoid tissue of non-malignant type, whether homologous or heterologous, and the essentially malignant type, simply on account of their similarity in microscopic structure.—Dr. POWELL inquired whether Mr. Haward had been able to make the diagnosis of Hodgkin's disease in this case, and if so on what grounds, as there was no fever till after the second operation. He had seen a case of Hodgkin's disease in which the fever was intermittent, occurring every five days for a period of twenty days, and on each rise of the temperature there was enlargement of the glands.—Dr. SILVER, in reply to Dr. Southey's remark, stated that in the patient referred to by him the earliest symptoms were supposed to be hysterical or choreic, the nervous symptoms being much more marked than the glandular enlargement.—Dr. SOUTHEY said that he put the question because he had collected twenty-two cases of lymphadenoid disease, in several of which the nervous phenomena were very marked. In one of the cases the symptoms were at first hysterical, of very pronounced character, subsequently passing into epileptiform attacks.—Dr. MOXON always felt great responsibility with regard to these cases in deciding whether any operative procedure was advisable. He had feared operation on account of the danger of causing acute laryngeal œdema. He referred to cases which were stated to have been cured by the use of arsenic abroad. He himself had used arsenic without effect.—Dr. GLOVER mentioned the case of a man fifty years of age, who had an enormous glandular mass in the right axilla, great enlargement of the liver, with a contracted, wrinkled condition of the spleen, and anasarca. The remarkable feature of the case was the sensation of great cold of which the patient complained; he inquired whether this had been observed in any of the cases referred to. The thermometer showed no rise of temperature. — Mr. HAWARD, in replying, said that he had wished to make it clear that he excluded scrofulous enlargement of the glands from consideration; in cases of scrofula there was no doubt a general vulnerability of the lymphatic system, which predisposed to enlargement from slight local causes. Here, however, there was no local condition; it was true that the swelling was first observed soon after an attack of scarlet fever, but the eruption of small-pox was rather a general than a local irritation, and there was no reason why it should be localised in the neck. His object was to inquire how far the removal of the glandular enlargements by surgical means was applicable. Cancer is not cured by removal, but there is often very material relief following such removal, and so also there was in this case. He thought he could remove the whole of the affected glands, and as the disease was a progressive one, he thought the operation justifiable. As to the diagnosis from scrofulous enlargement, he believed that if the glands were so much enlarged from scrofula they would also be caseous, whereas there was no tendency to suppuration, and no implication of the skin. In the earlier stages the diagnosis would be much more difficult. As to the condition of the blood, he had not found any such granules as those described; there were fewer red corpuscles than normal, but no aggregations of smaller globules. The temperature had not been regularly intermittent, there was no elevation above 103 except on one occasion, and it was noteworthy that it was not at all elevated in the early stages. There were no nervous symptoms at any time. He had not tried arsenic in these cases.

MEDICAL SOCIETY OF LONDON.

AT the meeting held on the 6th inst., Dr. Routh, President, in the chair, Mr. MAUNDER exhibited a patient whose elbow had been excised by him seven years ago at the time when he first discovered it was possible in the operation to secure active extension of the triceps muscle, and certainly in this case the extension was very good. Mr. Maunder requested, and the President, with the sanction of the few fellows present, accorded, that the discussion should be postponed to the next meeting.

Dr. ROBERT LEE brought forward a Pessary invented by Mr. Napier, which he (Dr. Lee) thought was calculated to supersede all others. He also showed a large number of well-known pessaries, and dilated at some length on their advantages and disadvantages from anatomical, mechanical, and physiological points of view. He considered red vulcanite to be the best material for them, and Mr. Napier's pessary is made of that material.—Mr. NAPIER said his pessary was on the same principle as his catheter, and originated from Mr. Henry Lee and himself. He thought simplicity was a great thing, and considered an elastic substance to be of advantage, as it went well with the movements of the body. —Mr. HENRY LEE was of opinion that the defect of most pessaries was that they dilated the muscular fibres of the vagina, and the fibres being dilated were likely to become paralysed.—Dr. GODSON stated that he had constantly used a pessary similar in shape to that of Mr. Napier's, though made of black vulcanite and not being elastic, but he had never made use of it except as a last resource, and he preferred the ordinary Zwanke's pessary.—The PRESIDENT was sorry to disabuse Mr. Napier of the idea that his (Mr. Napier's pessary was a new invention, as he (the speaker) had possessed a similar one made of soft india-rubber for ten years; he thought it laboured under great disadvantages in practice, and had found the ordinary Zwanke's pessary to answer very well.—Mr. H. LEE then stated he had tried a common india-rubber instrument and found it of no use. — Mr. NAPIER said his pessary was not supposed to meet all cases, but that it could be constructed of different sizes.—Dr. ROBERT LEE briefly replied, and the meeting adjourned.

NEW PREPARATION.

WE have received from Messrs. Bullock and Reynolds, of Hanover-street, a sample of a new salt—the citrate of iron and quinetum. Like the citrate of iron and quinine, it is in thin scales, of a greenish golden-yellow colour, and readily dissolves in water, forming a clear solution.

The process of Dr. de Vrij for obtaining all the alkaloids of the East India red bark (to which have been given the name Quinetum), and the introduction of the sulphate by Mr. Whiffin, promise to be of great importance both in commerce and therapeutics. It appears to be well established that every one of the chinchona bark alkaloids is possessed of antiperiodic properties; and quinine is generally considered the most powerful and certain in intermittent and remittent fevers. The relative value of the whole group as they exist in the bark, however, has not been at present experimentally determined, although the presumption is that the alkaloids collectively may prove to be in some respects more efficacious than any one of them when separately employed.

Many practitioners have expressed the opinion that quinine alone does not fully represent the remedial powers of the bark in substance. Is this opinion based upon experience in the employment of these remedies as general tonics and restoratives, or as antiperiodics? The citrate of iron and quinine, for the most part, is employed as a tonic and restorative, and we may fairly anticipate that the citrate of iron and quinetum will be found to equal, if not to excel, in efficacy the corresponding salt of quinine for these purposes. At the same time, a considerable saving will be effected by its use, it being cheaper than quinine; and, as the employment of the latter is much restricted by its costliness, we may hope the introduction of quinetum and its salt will prove a very general advantage.

POISONING BY MUSSELS.—A man at Dewsbury is stated to have been seized with symptoms of poisoning after partaking of a dish of mussels, purchased from a hawker. Despite the efforts of the doctor called to the case, the unfortunate man died about two hours after the commencement of the symptoms.

THE LANCET.

LONDON: SATURDAY, DECEMBER 18, 1875.

THE frightful colliery explosions of the last week or two and the profound grief into which they have thrown the nation, render it necessary to review our knowledge in regard to such disasters, and to inquire what precautions may be adopted and what experiments tried with a view to reducing their frequency and fatality. The present state of things cannot continue. Measures must be found for diminishing the evil, and no economical or commercial considerations must or will be permitted to stand in the way. For not only is the mortality of such disasters terrible in itself and productive of misery in hundreds of homes, but it falls, as scarcely any other calamity does fall, exclusively upon a section of our community to whose labours every individual is indebted.

Fire-damp is a mixture of gases which varies somewhat in composition, but which consists essentially of methane or marsh gas. This is the lightest and most diffusible gas known, except hydrogen. It is not poisonous, is very inflammable, and, when mixed with air, highly explosive. Carbonic acid, the "choke-damp" or "after-damp" of miners, is produced by its combustion. Under ordinary circumstances its flame does not pass through wire-gauze, and hence the protection of the safety lamp; but this valuable safeguard is lost when a rush of explosive gas takes place, or when the lamp is swung violently in the explosive atmosphere. Fire-damp is emitted very irregularly in mines. Some mines are considered safe—a safety which too often proves illusory; while others are known to be "fiery," and even in the latter all calculations are constantly disturbed by the sudden outburst of a torrent of compressed gas released by the blow of a miner's pick.

Of the causes which lead to explosions, some are no doubt due to mere carelessness of employers, or men, or both. It is notorious that the men will, if they can, take the tops off their Davy lamps to get a little more light, even in a fiery mine; and in one of the recent narratives we noticed that lucifers had been found in the pockets of some of the men. Many accidents arise, it may safely be presumed, from blasting. And, lastly, many are led up to by the dangerous assumption that a mine is safe because it has always been reckoned safe. For all such disasters—we will not call them accidents—obvious remedies suggest themselves. The inspection of lamps is already pretty rigidly enforced in all mines, we believe, but the inspection of men should be equally rigid. There are always reckless men who will smoke their pipes in a dangerous mine as they would in a powder magazine, but they must be suppressed in the one case as they are in the other, since they cannot run their risk alone. As for blasting, when blasting is really necessary, and not a mere piece of unnecessary economy, it must be carried out under stringent regulations, and never when the galleries are crowded with men. And, finally, all mines must be assumed to be dangerous if not conclusively proved to be safe.

Of scientific safeguards against explosions, the most important is admitted on all hands to be thorough ventilation. It can never be a complete protection, for some mines cannot be kept free from fire-damp, and the sudden bursts of gas of which we have already spoken set it for a time at defiance; but it is at all times most valuable, not only as diminishing the chance of explosion, but also as tending to localise and diminish the force of an explosion when it occurs. The dangerous work of exploration after an explosion might, we think, be lessened by an application of the DENAYROUZE apparatus to which we drew attention some time ago; and it is conceivable that respirators packed with fragments of caustic potash might be used for the same purpose. They would, of course, have to be kept ready for use in air-tight cases.

But, after all, further scientific appliances are urgently wanted, and might, we believe, be found, if sufficient diligence were used. What has become of Mr. ANSELL'S exceedingly ingenious "fire-damp indicator"? We have seen it in use, and can testify to its marvellous delicacy. We are aware of the difficulties which lie in the way of its employment. It is excellent when suddenly brought into the doubtful atmosphere, and will, by the completion of an electrical circuit, carry its indications to any distance—say to an office at the surface; but it becomes inert when it has remained for some time in any atmosphere, good or bad. Nevertheless we do not think it has had a sufficient trial, and should never be surprised to hear that some slight modification had made it all that could be wished as a mere indicator. What is wanted in this direction is an indicator not liable to get out of order, which shall from hour to hour carry trustworthy records of the state of the atmosphere from all parts of the mine to an office on the surface. The responsible man would then know where his immediate attention was required, and if no other good result ensued he would, at any rate, know in any given case whether blasting might or might not be permitted. If Mr. ANSELL'S apparatus cannot be made to do this, some other might probably be found, and coal-owners would no doubt be glad to co-operate with Government in affording ample encouragement and reward to anyone who could offer even a chance of supplying the want.

THE present Coroner for Central Middlesex has held office for a little more than twelve months. He had previously been deputy coroner for as many years; and it is curious to contemplate the resolute manner in which, "armed with a little brief authority," he has shown his disregard for the golden opinions he had won while holding the subordinate post. When Dr. HARDWICKE was a candidate for the vacant coronership we gave him our unqualified support because we felt that his conduct as a deputy fully justified his election to the more important office. A reference to the expressions which we used when commenting on Dr. HARDWICKE'S candidature and election will show that our bias was entirely in his favour, and that nothing but a grave sense of our duty towards the public would be likely to draw from us any strong terms of adverse criticism on his

shortcomings. Dr. HARDWICKE had not been in office three months before his want of tact in the matter of Sir CHARLES LYELL'S death was spoken of in terms of just rebuke by the Home Secretary in the House of Commons. Commenting on this unpleasant episode, we expressed our opinion that "Dr. HARDWICKE failed in that discretion which is, or ought to be, a principal quality in a coroner"; and that a "few more such errors would destroy the strong public faith in medical coroners." At the same time we expressed a hope that, profiting by his experience, his future conduct would be marked by more discretion. The delusive nature of this hope was, we are sorry to say, amply demonstrated before Dr. HARDWICKE had been three months more in his office; and it was in May that he made the wholly unwarrantable statement that, in a certain case, "the conduct of the medical officers was simply atrocious." Reviewing his conduct upon this occasion we observed that the gentleman whose conduct was called in question was, in our opinion, in no way deserving of censure, and that "the Coroner's remarks were not only unnecessarily harsh, but calculated to mislead the public, whom soberly to instruct is one of the coroner's duties." Again, in May, we find Dr. HARDWICKE holding an inquest at St. Mary's Hospital on a cabman who had fallen dead off the box of his cab, and, without calling the medical man who had attended him, and without a post-mortem examination, allowing a jury to return a verdict of "Death from natural causes." For the next five months the Coroner's conduct was not publicly called in question; but in November we hear of his encouraging a jury to censure a medical man for contempt of court, when he ought to have known that only his own beadle was to blame. The murmurings of disapproval have scarcely died away when the name of Dr. HARDWICKE again becomes prominent; and it is a singular and an unfortunate fact that this last resembles the previous cases, in that the Coroner is found in unfortunate collision with the members of his own profession, towards whom he has systematically behaved with marked discourtesy under a mistaken notion probably of publicly exhibiting his impartiality towards all classes. The facts of this last case are briefly as follows.

An eminent member of our own profession, Mr. ACTON, who had just entered his sixty-third year, had been for some months past in failing health. This was a fact well known in his own circle. On Sept. 29th he fainted in the streets, and was brought home by a policeman in a cab. This warning was not lost upon the deceased, who at once set to work to settle his affairs and leave his estate in order for his executors. At the same time he consulted Sir JAMES PAGET, Dr. MURCHISON, and Dr. QUAIN respecting his health; and we believe these high authorities concurred in the opinion that Mr. ACTON was the victim of heart disease. Dr. MURCHISON might be looked upon as his ordinary medical attendant, but, Mr. ACTON himself being a medical man, Dr. MURCHISON only saw him occasionally, the last time being in October. On the morning of Dec. 7th Mr. ACTON was found dead in his dressing-room, and his family summoned their nearest neighbour, Dr. HALL DAVIS (who had not, however, been consulted by Mr. ACTON during life), whose melancholy duty it was merely to inform them that life was really extinct. On December 8th, Dr. MURCHISON, assisted by Dr. CAYLEY, made a post-mortem examination, the result of which was to verify beyond question the diagnosis which had been made during life. In the meantime, however, the Coroner, through his beadle, had made arrangements for an inquest, and had deputed Dr. HALL DAVIS (who had never seen the deceased professionally during life, and consequently knew nothing of his condition except by hearsay, and whose devotion to obstetric medicine causes a post-mortem examination to be to him a prohibited duty) to make the post-mortem and give the necessary evidence. Dr. HALL DAVIS deputed Dr. CAYLEY to make the post-mortem, and these two gentlemen both agreed with Dr. MURCHISON as to the cause of death.

Now here we have the case of a medical man, whose condition had been diagnosed during life by the heads of the profession, dying of the disease which had been diagnosed, and the diagnosis further confirmed by a post-mortem and microscopic examination by two persons than whom none are better qualified in the profession to come to a proper conclusion on the matter.

After the post-mortem examination the following certificate was furnished by Dr. MURCHISON:—

"This is to certify that William Acton, aged sixty-two last birthday, repeatedly consulted me during his lifetime for symptoms of heart disease; that I last saw him in October; that he died on December 7th, at 17, Harley-street; and that the cause of his death was fatty degeneration of the heart, confirmed by post-mortem examination."

If the circumstances attending Mr. ACTON'S death were such as to justify a coroner's inquest, then we say advisedly that we cannot conceive any circumstances under which an inquest would not be justifiable.

To continue our narrative. Since the Coroner had issued his order for the inquest, Mr. ACTON'S son took the above certificate to the Coroner, in order, if possible, to avert what could not be but a painful proceeding to his family. The Coroner's conduct, when confronted with the certificate, is, to say the least, instructive. He informed Mr. ACTON jun. that he was unable to accept the certificate unless they would do so at the Registry Office; and at the Registry Office this gentleman was informed that, since the Coroner had issued his order for an inquest, they dared not accept the certificate under pain of a heavy penalty. The Coroner, not seeing fit to countermand his order for an inquest, the inquest was accordingly held; and we understand that Mr. ACTON has, in the most public-spirited manner, brought the whole matter officially under the notice of the Home Secretary, who, probably, will forward the facts for the Lord Chancellor's perusal; and it remains to be seen whether Mr. CROSS or the Lord Chancellor is capable of holding in check that excessive zeal which has now on too many occasions proved harassing and vexatious to the inhabitants of Central Middlesex.

IN the first of the two letters with which Dr. JOHN SUTHERLAND has recently favoured us (THE LANCET, Nov. 7th), the attention of our readers can hardly fail to have been arrested by the following sentences:—"In the whole history of human progress there is nothing more remarkable than the advance of sanitary improvement in India

during the last ten or twelve years. There is nothing in the West that can be compared with it. The work is far from being done; but very much has been already accomplished." If this view of the progress of sanitary work in India be right, it should serve as an additional incentive to sanitary workers in this country to bestir themselves, so that at least sanitary improvement here may keep abreast of sanitary improvement in India, if it may not hope to keep in advance. If the view be wrong, it is necessary that it should be corrected, lest delusive conceptions of work accomplished should aggravate the mischief arising from such faulty methods of work in India as we had occasion to direct attention to last week (THE LANCET, Dec. 11th). At all times we have never failed to acknowledge and express our admiration of the greatness of the sanitary work done by the Government of India since 1864; but we have been accustomed to measure that greatness by the peculiar difficulties it has had to overcome, not by comparison with work done in this country. But Dr. SUTHERLAND, in the interest of the Army Sanitary Commission, now challenges this comparison; for we presume that his reference to the West really means to this country, any other comparison being, so far as we can apprehend, purposeless. It is difficult to approach the discussion of the question thus raised with gravity. In England, from 1848 to the present time, the whole aim of sanitary legislation has been the development of local sanitary self-administration. Every step in legislation since that date has been the result of a growing desire on the part of local authorities to possess additional powers for dealing with matters relating to the public health; and the Public Health Act of 1872 made a notable step to the completion, on the administrative side, of this steady process of local governmental education in sanitary matters. Parliament, indeed, has lagged behind rather than kept in advance of public feeling on these subjects. Sanitary work has progressed in due proportion to the progressive education in local sanitary government, marked by the growth of sanitary legislation. The amount of work done, measured by a cost of millions of money, is unimportant compared with the fact of its doing and maintenance having depended on the action of the people, or rather the ratepayers themselves. Turn we now to India. It is to the honour of the great administrators of that Empire that they have held that true sanitary progress among the populations of India will, as a rule, best be secured in proportion as it can be based upon a principle of local administration analogous to that developed in England. This view, we believe, has been steadily maintained by successive Viceroys, and its development has at all times been regarded as of primary importance in the working of the present sanitary organisation of that Empire as it affects the civil population. But what has been accomplished? Under an impulse dating from the Royal Sanitary Commission of 1859, and primarily relating to the health of the army in India, and by an expenditure wholly Imperial, this has been done: The army has been put into a healthier state; and a commencement has been made, by the appointment of sanitary commissioners for the different provinces and capital cities, of an organisation for the sanitary administration of the civil population. We have brought, at an enormous cost, under decent sanitary control the British army in India—numbering, say, 70,000 men; we have made a respectable beginning of getting under like control the Native army—say of 130,000 men; we have started sanitary works, on European models, in the capital cities of the Presidencies, with their collective population of, say, 2,500,000; and for the balance of the population of India—say 180,000,000—we have provided some twelve sanitary commissioners for provinces and a few medical officers of health for big towns, and have through them induced local sanitary action at a few points, and have regulated religious and other fairs. We have also promoted vaccination. This is the kind of result which, it is to be inferred from Dr. SUTHERLAND'S letter referred to, the Army Sanitary Commission holds to surpass sanitary progress in this country—that is to say, the West. If this be the view of the Army Sanitary Commission, it proves that it mistakes the actual position of sanitary progress in India, as it has mistaken the requirements of sanitary investigation and work.

Indian sanitary work can well afford to stand upon its own merits. To claim for it other credit than that which properly pertains to it is to prejudice it in the minds not only of this country but of other nations. The difficulties which beset sanitary administration and work among the civil population of India are much too serious that it should be attempted to veneer them with fallacious comparisons. It must be sufficiently difficult already, we should imagine, having regard to the proceedings of the late International Sanitary Conference, for the Indian Government to satisfy Continental Powers that it is doing not only all that was practicable for it to do, but all that could, with certain reservations as to method, reasonably be required from it in sanitary works, without having to contend with obstacles raised by its own advisers.

Annotations.

"Ne quid nimis."

OVERWORK AT SCHOOLS.

THE letter written by the Rev. Frederic W. Farrar, which appeared in the *Pall Mall Gazette* of the 14th inst., confirms our statement that at Marlborough, as at other first-class schools, the hours of work are not excessive. Mr. Farrar says "the time spent in our school by any boy only amounts to twenty-six hours a week, and, even with the necessary preparation of lessons, falls very far short of the forty-five and forty-eight which are required at some schools." Marlborough has a high repute for scholarship; its boys do well at the universities, and in the competitive examinations for the Civil Service and Army there are few schools which can show greater measure of success. Yet this is attained without any undue pressure or forcing. The secret of this success lies, no doubt, in the method of teaching adopted. And, as we have said before, the more closely the old public school traditions are adhered to, the sounder will be the system of education, and the greater will be the ultimate success of the scholars. Our remarks have been considered to have pressed hardly on the masters of the schools censured for working their pupils eight to nine hours a day; and it is urged the fault lies with the Government and with the examiners who require so high a standard of excellence in such a multiplicity of subjects

that cramming becomes a necessity. We hold, however, to our first opinion. We have seen how, at the chief public schools and at well-managed proprietary colleges like Marlborough and Cheltenham, considerable success at these examinations can be attained with a moderate amount of work; and we are sure, wide as is the range of subjects required by the majority of competitive examinations, they are within the grasp of the intellectual capacity of the average schoolboy if properly taught him. And we believe that examiners are learning to discriminate between a thoroughly taught and gradually matured mind, and the ill-digested masses of information acquired by the pupil of the grinder. We believe the real fault lies with the parents, who insist that their sons shall have "every advantage"; hence Greek, Latin, French, German, mathematics, drawing, modern history, ancient history, ditto ditto geography, chemistry, botany, natural philosophy, philology, &c., are poured in at the rate of so many hours a day, utterly regardless of the boy's natural bent or capacity. A few boys with retentive memories retain some smattering of this farrago of learning, and achieve some success, which, duly advertised, renders other parents anxious to join in this "fetish worship," more especially as the school possessing "every advantage" is often also more economical than the public schools or the higher class of proprietary colleges. The extent to which the evil is carried on, especially in the neighbourhood of London, is extraordinary. A gentleman connected with an educational establishment of high standing, and who has often spoken with authority on educational questions, considers the subject to be worthy of Government inquiry. Only a Royal Commission could get at the real truth and reveal the amount of mischief that has been done by the reckless employment of the grinding system. In the same manner that factory children are protected from excessive physical labour ought the children of our middle-classes to be protected from excessive strain that ambitious parents and schoolmasters would put on them. It should never be forgotten that youth is the period of growth and development, and that the boy is then laying in the stock of health which has to bear him bravely through the vicissitudes and struggles of adult life. A few hours of work can speedily be made up later on, but nothing can restore the tone to the jaded nerves exhausted by premature toil and excitement.

ALCOHOL AS A MEDICINE.

A DIFFICULT question in medical casuistry was suggested the other day at an inquest held by Dr. Diplock. An infant died under the following circumstances. After two days' illness, during which only some medicine from a chemist had been administered, Dr. Woolrych was sent for, who found the child suffering from an acute lung affection, and ordered that the child should have brandy and milk. The father refused to give the child brandy; he was a total abstainer, and "did not believe that it would do any good." Dr. Woolrych then declined to attend the case. Another medical man was sent for, but before he arrived the child was dead. Dr. Woolrych was asked by the coroner whether he suggested any other stimulant, such as ether or chloroform, and replied that he did not. It was impossible to say that brandy in this case would have saved the child's life; indeed, it is obvious that the child was already past hope. Accordingly an open verdict was returned. The wider question, however, is raised, Is a medical man justified in withdrawing from a case in which his directions as to the administration of stimulants are openly repudiated? Ought he to refuse his help, or should he endeavour to replace the obnoxious brandy by other stimulants—ammonia, ether, chloroform? It is doubtful how far these stimulants can take the place of brandy. Their effect is different; their action produces other secondary consequences more deleterious than those of ethylic alcohol. They cannot be substituted for wine or brandy. They may supplement, but cannot replace the latter. A case could not be treated on such conditions without deliberately accepting an inferior vantage ground for the contest with disease. It is certainly a course more consistent with self-respect, more consistent with due regard for the wider interests of humanity, to decline to undertake the treatment of disease weighted with such needless and prejudicial conditions. It may be suggested that the difficulty might be in many cases overcome by administering alcohol under the guise of physic. But this is a deliberate deceit, and it would be better to decline the management of a case on such terms, and to allow the responsibility of the results to rest where it is deliberately assumed.

THE HARVEIAN LECTURES.

THE second of these lectures, on Bright's Disease considered in relation with arterial tension from blood contamination, was delivered before the Harveian Society on Thursday, the 9th inst., by Dr. Sibson, to a numerous and appreciative audience. The greater part of the lecture was occupied in the demonstration, by means of the oxyhydrogen lamp, of the sphygmographic tracings of the pulse in cases of the different forms of Bright's disease under varying conditions of pressure and tension. Of these, although of great interest, it is impossible to give any idea without the aid of diagrams. Dr. Sibson exhibited a sphygmoscope which he has long used to estimate the pressure in the vessels, and also a modification of the sphygmograph, in which, by means of a screw, the pressure can be more easily and rapidly regulated than in Dr. Sanderson's modification of Marey's instrument. In the latter portion of the lecture Dr. Sibson took up the subject of treatment, classifying the therapeutic measures under three heads. These were, first, to promote the elimination of the effete products from the blood by the various channels; second, to avoid the introduction of other poisonous material which could tend to aggravate the condition of the blood; and, third, to enable the patient to live above and in spite of the blood condition. To fulfil the first indication, the ordinary measures were recommended. Under the second heading, Dr. Sibson dwelt especially on the importance of feeding the patient on substances which are free from the products of tissue oxidation and yet afford a great amount of nourishment; and on this ground he strongly recommended milk as a diet in preference to beef-tea, the latter containing so large a proportion of extractive matter. The drinking of pure water, such as Malvern water, or of soda water in quantity, was also advised. On the other hand, the lecturer eloquently enforced the danger of administering alcohol in such cases; he regarded it as only adding fuel to the fire, and overloading the blood with a poison which in itself is liable to set up similar changes in the blood and vessels to those induced by the morbid poison of Bright's disease. He allowed, however, that in some cases the administration of alcohol seemed to give tone to the system, and enabled it to excrete the morbid materials more readily. The employment of opium or morphia, whether subcutaneously or otherwise, was justly condemned in strong terms in cases where there are albuminuria or signs of renal and vascular degeneration; and the lecturer urged the importance of examination of the urine before the administration of these drugs.

Finally, in order to enable the patient to live above the influence of his disease, Dr. Sibson strongly recommended that plenty of exercise should be taken, since the muscular action not only enables the heart to perform its work with

less effort, but promotes elimination. Cheerful society, healthful bodily and mental work were, he considered, far better than inaction, for by means of them the healthful balance of function and the mutual reaction of organs might be maintained even with a partially diseased organ, and the patient be thus in a state of relative, if not of actual health. Dr. Sibson concluded an interesting lecture by thanking those who had enabled him to undertake and assisted him in a course of investigation at various hospitals, which had extended over many months.

THE OPPONENTS OF THE CONTAGIOUS DISEASES ACTS AGAIN.

We gather from the *Folkestone Chronicle* that the agents of the Society for the Abolishment of the Contagious Diseases Acts recently convened a meeting in that town, with the view of getting a public expression of opinion adverse to the Acts in question. If the opponents of these Acts were content to address their appeals and arguments to those to whom they should be limited, we should be content to leave this subject alone, and to accept the verdict of impartial persons of reflection in regard to it, but we must strongly protest against the course that is now being adopted. We learn that during the day of the meeting "bills of a most objectionable character were circulated about the town and put into the hands of young girls, in which they were asked to attend." There was a large gathering of males, including a number of the more respectable inhabitants, but we are glad to learn that no female was present at the meeting. The attempt on the part of the deputation from the Association for the Repeal of the Acts was a miserable failure—indeed, the tables were completely turned on them, for the amendment in favour of the Acts was carried all but unanimously. The deputation might have known what to have anticipated from the fact that the inhabitants of Folkestone have had an opportunity of observing for themselves what has been the effect of the working of the Acts in their neighbourhood, and many of those at the meeting were well acquainted with the subject, especially Dr. Gill, who replied in the most effective manner to the statements and reasons adduced by the deputation. To borrow the words of our contemporary, "in no town have they been so entirely snuffed out as in Folkestone." The Mayor, very rightly, refused the deputation the use of the Town Hall, and we heartily concur with the *Folkestone Chronicle* in believing that "such agitations against these Acts are thoroughly unjustifiable and indecent."

OFFICIAL WORRY.

If we were asked to assign one cause as more potent than another, or possibly than all the rest put together, for the existing discontent among army medical officers, we should have no hesitation in referring to the state of worry and irritation brought about by constant changes. This has been going on for years past. What with the constant succession of new or amended warrants, regulations, army circulars, and what not, nobody knows exactly where he stands or what he is to do. This worrying system seems to have affected all branches of the public service more or less. We recently saw it aptly remarked somewhere that the Government treats a public service exactly as a schoolboy does the seeds that he has sown in his garden; he is for ever digging them up to see how they are getting on. Let anyone address himself to the first half dozen men belonging to as many public services, and what will he hear? That everything seems to be for ever changing, and nothing fixed; that regulations are like words writ in sand—gone before you know where you are! To-day a Liberal wave effaces this, and to-morrow the Conservative reaction re-established that; while a host of minor officials belonging to both parties, or to no party at all, seem to employ themselves in giving a new or different meaning to what is the natural one to everything they come across. The army medical service is organised on neither a regimental, general, nor any other basis at present; but a sort of hybrid system exists which pleases no one, and those charged with its working are loud in their complaints that their rights and privileges have been curtailed or abrogated altogether. The last regulations as to the issue of forage or forage allowance will be sure to add to the discontent. We question whether it will be found practicable to carry them out, and, so far as we can discern, nobody will be benefited by the new ruling that duty and not rank is to be the officer's only title to forage, unless it be the equestrian statues in London, and they may fairly claim a title to a forage allowance inasmuch as they are "permanently mounted."

THE PRINCE AND THE DOCTOR.

Our contemporary, the *Examiner*, recently devoted an article, under this heading, to the sudden and unlooked-for check which the triumphal progress of the Prince of Wales through India had experienced. Dr. Fayrer, the medical ruler of the expedition, having heard that cholera had shown itself in some parts of Madras, issued an edict tabooing, it said, the "benighted presidency." Here lies cholera, there lies cholera: at Coimbatore and Bangalore, at Madras and Pondicherry, wherever the inhabitants of the "benighted presidency" do congregate, our contemporary went on to say, the scourge of the East is uplifted, and the doctor puts his veto on the projected excursion. Our contemporary agrees with everybody that Dr. Fayrer was only discharging his duty, if cholera existed in Madras, by putting the presidency under the ban; but it goes further, and points out that Dr. Fayrer has evidently not yet learned to discriminate between the two forms generally assumed by the disorder in the East. Of epidemic and endemic cholera there is little fear, the season having advanced too far for an outbreak; and as to the sporadic type, now or until very lately existing at Madras, that may be found in almost every great Indian city at all seasons of the year. Dr. Fayrer will probably be amused, if not instructed, by the points of contrast between the two forms of cholera indicated by our contemporary, should he happen to read the article in question. It is neither an impossible nor a very improbable conclusion, however, to assume that a physician who has spent all his life in India will have already learned anything that the article in question is capable of teaching him. Meanwhile, the Prince's arrival in the "benighted presidency" has been announced, although of course our contemporary was at the time quite justified in regarding it as very improbable that such would be the case.

THE KEIGHLEY GUARDIANS AS HYDROPATHISTS.

Now that the Keighley Guardians have lost the excitement of antagonism to law and common sense, by abandoning their opposition to the Vaccination Acts, they are to be invited to other displays of the art of mixing up the two functions of guardians and doctor. "The chairman," we read, at a recent meeting "gave notice that he would, at the next meeting of the board, bring forward a motion for the purpose of getting the board and the medical officer of the north district—Mr. Roberts—to co-operate in treating patients hydropathically." Why "Mr. Roberts, of the north district," should enter into this sort of medical partnership with the guardians is not stated. We have one amendment to make on this suggestion of the chairman.

We should propose to substitute for the word "patients" the word "guardians." We could imagine nothing better for the guardians of Keighley than cold-water treatment. They have had a good deal of cold water thrown on them lately by the Court of Queen's Bench, by other boards of guardians, and, most of all, by a few sensible members of their own board. We should not, however, object to see them subjected to hydropathic treatment by Mr. Roberts; but we should decidedly protest against the paupers being subjected to hydropathic treatment, the result of co-operation between the guardians and Mr. Roberts. If Mr. Roberts thinks any of his patients want any particular form of treatment, he will doubtless see that they are supplied with the means of applying it; but on the mere instigation of the chairman of the Keighley board, to "occasionally" give paupers, in the hard conditions of winter, a turn of hydropathy, is a proposal which seems to us to deserve watching by the Local Government Board. Things must have come to a pretty pass in the Keighley board when the chairman has to suggest the treatment of patients to the medical officer! What next?

THE EPIDEMIOLOGICAL SOCIETY: CHOLERA IN SYRIA.

AT the meeting of the Epidemiological Society, on the 8th instant, the President, Mr. Netten Radcliffe, in the chair, a paper was read communicated by Dr. Wortabet, of Beyrout, on the recent outbreak of cholera in Syria. The paper dealt rather with the manifestation of the disease in Beyrout than with the general distribution of the epidemic in Northern Syria. It threw no light upon the origin of the outbreak, and the author maintained a judicious reserve upon this question, hesitating to express an opinion where the information was so imperfect. In the discussion which followed, and in which Mr. Cornish, the Sanitary Commissioner for the Madras Presidency, Mr. C. Macnamara, Inspectors-General Dr. John Murray and Mr. R. Lawson, Dr. Thorne Thorne, Dr. William Squire, and others, took part, the subject chiefly considered was the data which existed regarding the origin of the outbreak. These were so imperfect that it was obvious discussion was idle, and more than one speaker protested against certain speculations which were already being indulged in as to the so-called *de novo* origin of the disease. Mr. Macnamara especially showed how, in regard to other outbreaks of cholera, long regarded as indicating that the epidemic disease could have birth elsewhere than in India, that they were filiated with the malady prevailing elsewhere. Some interesting remarks on the question of the dormancy of epidemic diseases were made by Dr. Thorne Thorne and Dr. William Squire.

THE EFFECT OF COLD WEATHER UPON MORTALITY.

THE mean temperature was continuously below the average during the twenty-two days ending 11th inst.; at the Royal Observatory, Greenwich, the mean for this period was no less than eight degrees below the average. The mean temperature of the week ending 4th, was more than a degree below freezing point, a lower temperature than in any week during the cold weather in November and December last year. The rate of mortality in English towns, however, does not hitherto show nearly the same excess as prevailed at this time last year. During the five weeks ending 27th November, the rate of mortality in eighteen of the largest English towns had been remarkably stationary, and averaged 24·1 per 1000, whereas in the two weeks ending 4th and 11th inst., the rate increased to 25·9 and 28·1, respectively. In London the rate in the five weeks ending 27th ult. averaged 23·4, and has been equal to 24·7 and 28·1 in the two subsequent weeks. From published metereological returns it appears that the temperature has recently been lower in London and Bristol than in the more northerly towns, and hence the death-rate has shown, in the past two weeks, a higher percentage of increase in the metropolis than in the seventeen provincial towns. According to the Registrar-General's last published weekly return, the death-rate in London from diseases of the respiratory organs was equal to 7·7 per 1000 in the week ending 11th inst., against 4·6 in the five weeks ending 27th ult., thus accounting for about two-thirds of the excess rate from all causes, which was equal to 4·7. It it worth notice that in spite of the recent cold weather the death-rates in Leeds, Sunderland, and Newcastle-upon-Tyne, have steadily declined during the past three weeks in face of a large increase in most of the other towns.

THE CATASTROPHE AT NORWICH HOSPITAL.

THERE is but little to add to the details contained in the local papers of the late terrible occurrence at Norwich Hospital, but at the moment of going to press we have received a few additional particulars. The three unfortunate lads who were murdered had their heads simply crushed and smashed by repeated blows with the tongs, the weapon used by the alleged murderer. A fourth boy, named Clarke, a patient of Dr. Eade's, has lost the slight sign of rallying that was manifested, and a fatal issue is feared. He is suffering from a fractured skull, and has been unconscious from the first. The fifth lad, also a patient of Dr. Eade's, has a battered and injured skull, but is much less seriously hurt, and it is confidently hoped that he will survive his injuries. It does not appear that any blame is attributable to anyone—certainly not to those in the hospital. But for the very gallant and determined stand which the house-surgeon made against the frenzied man the consequences, already so terrible, might have been frightful to contemplate, and we think his conduct deserving of the greatest praise.

FLOCKS.

A CORRESPONDENT of the *Glasgow Herald* has called attention to a hitherto unsuspected source of disease. For stuffing beds and furniture a substance called "flocks" is in common use, and the source and character of this material are, it is said, such as to render it a most undesirable material for the purpose, and one not unlikely to be a ready and effective vehicle for the conveyance of contagion. The flock manufacturer collects rags of every kind, and for the most part of the most filthy material, "the pickings of ash-pits, the worn-out clothes of all classes, including the cast-off greasy tatters of the denizens of the slums and wynds of our towns and cities," and this material is, it appears, made up into flocks without any preliminary purification. The rags are dried, passed over revolving rollers with prongs of teeth, which tear them down to fibrous consistence, clouds of dust flying from them and passing up chimneys, to darken the air, and cover the surface of the neighbouring land and houses.

There are, however, we believe, flocks and flocks—white flocks and black flocks, and the description we have quoted of the source of the material employed is true only of the coarser variety of black flocks. It is indeed a loathsome substance—the rags from which it is made, and often the "flocks" itself, swarming with animal life, and it is utterly unfit to be employed for stuffing any article of furniture, far less bedding. But the "white flocks" is a very different substance; the best is a pure white soft cottony material, the product, we believe, of an Indian plant. It is preferable,

in fact, to the imperfectly preserved and often not inodorous feathers, which are often put into beds. The black flocks is likely to be a grave source of disease, and we agree with the correspondent whose letter we have quoted, that its use should be conditional only on absolute purification. The matter is one which deserves and should receive the immediate attention of the sanitary authorities of the districts in which flock-mills are situated. We are not surprised to learn that the manufacture is a most unhealthy one, the health of the workpeople suffering very seriously from the contamination of the atmosphere produced by the flying particles of impurity.

ST. THOMAS'S HOSPITAL.

Ugly rumours have long been abroad of the persistence of typhoid fever among the resident staff at St. Thomas's Hospital. Although some of the accounts have been exaggerated, there is a considerable element of truth in the reports. It is not, for instance, true that many of the nurses and dressers have died of typhoid fever contracted in the hospital, but there have been within the past twelve months three or four deaths from typhoid fever. Some months ago typhoid broke out in the apothecary's house, and a search showed, we believe, that there was some faulty drainage, but this has been put right. It will be remembered that a dresser died a short time ago in the hospital of typhoid fever, and we took the opportunity of calling attention to the wretched and dirty condition of the small rooms in which the dressers were expected to sleep at night and to occupy during the day. Something has been done to make these chambers more wholesome and habitable. At present typhoid seems to have attacked the nurses. The night superintendent died recently of the fever, and a sister and a nurse are now ill with what is believed to be typhoid. How this disease has been contracted is a problem which the Committee of St. Thomas's would do well to submit to its medical staff for solution.

THE TOUR OF THE PRINCE OF WALES.

According to the latest written intelligence received by us of the Prince's tour, dated the 21st ult., His Royal Highness left Bombay on the 17th, and went to Baroda in excellent health, as were all the party. After all the ceremonies and parades of Bombay, the Prince enjoyed his cheetah hunting and black buck shooting, and has hitherto stood the heat as well as, if not better than, most English new comers. Lord Charles Beresford's accident at Poona was only a bruise, of which he soon recovered. His Royal Highness visited the European Hospital at Bombay, and it is to be hoped that some good may arise from this circumstance, as several of the defects of that institution were brought to his notice. The reports of cholera were so rife from Madras at the date of our correspondent's writing that it was deemed advisable to defer His Royal Highness's visit for a time.

UPPINGHAM SCHOOL.

The question has arisen as to the reopening of the Uppingham School. The sanitary authority of Uppingham report that the condition of several of the school-houses is such as to necessitate material alterations in their sanitary arrangements, and they discountenance a return of the scholars until these alterations have been effected and each individual house in connexion with the school is put in a perfect sanitary condition. We agree with Mr. Rawlinson, the Government inspector, that till the plans, reports, and estimates are submitted to him for his approval, it is "premature to publish any statement relative either to the state of the town or to the state of the schools." But surely it is equally premature to allow the return of the boys before the official statement of the causes leading to the outbreak has been made public, and the assurance given that all sanitary defects have been remedied. We strongly advise parents not to allow their boys to return to the school till they have received this assurance from the report of the Government inspector, who alone has the responsibility of speaking authoritatively on this point.

THE HOSPITAL SUNDAY FUND.

The Council of this fund met on Friday, the 10th inst., under the presidency of the Lord Mayor. It is gratifying to have to notice that the new Lord Mayor displays a personal interest in the institution of Hospital Sunday. The meeting was well attended by clergymen and laymen. The fact that the sum collected this year is less by £3000 than that collected last year, was satisfactorily explained by two simple circumstances—viz., that the day of collection was a very wet one, and that some unfavourable feeling had undoubtedly been raised by the unseemly action of the representatives of special hospitals in the beginning of the year. Now there is practical unanimity on most points, and the distribution of this year has given satisfaction, except to those institutions which used to receive more from local collections than they do from the fund. These institutions are very few in number, and their claims are comparatively slight, so that it would be an act of policy as well as justice on the part of the Council to see that they are indemnified out of the fund for the loss of local collections. The object the Council should aim at is to liberate the clergy for a great, hearty, and consentaneous appeal that should supersede the petty appeals for local medical institutions.

THE SANITARY CONDITION OF NORTHFLEET.

With reference to our remarks on this subject in a recent issue, we have received a communication from the Board of Guardians of North Aylesford, disclaiming all responsibility for the sanitary condition of Northfleet. It appears that subsequent to the passing of the Public Health Act of 1872, by which Northfleet was constituted a part of the rural sanitary district of North Aylesford, that parish was, in June, 1874, created a local board district. The local board of Northfleet, therefore, now constitutes the urban sanitary authority for that parish. The thirty-nine deaths registered in the parish and local board district of Northfleet during the three months ending September last were equal to an annual rate of 23 per 1000 of the population, estimated at 6874, and included ten, or 26 per cent., which were referred to the seven principal zymotic diseases, of which five resulted from whooping-cough, two from fever, two from diarrhœa, and one each from small-pox and measles. We can readily understand that the North Aylesford guardians are glad to be able to repudiate any responsibility for the present sanitary condition of Northfleet, and trust that the local board, the present sanitary authority, will be as ready to take measures to improve the health of the parish.

THE WARNING SYMPTOM OF SLEEPLESSNESS.

It is of course premature to offer any remarks on the "Tragedy at Norwich," but there can be no objection to urging very strenuously upon hospital surgeons and practitioners generally, who are not specially familiar with the symptoms of mind and brain disease, the imperative necessity of treating "sleeplessness" as a warning symptom. A "curious patient," so described because he does not sleep, should be at once placed under proper supervision, for his own sake and the safety of those around him. Inability to

sleep is one of the most significant indications of a condition of nervous irritability or mental excitement which may at any moment assume the form of uncontrollable violence. Delirium tremens, traumatic delirium, and the most dangerous forms of mania are all prone to give this warning token of their presence, and scarcely any other. Without in the least prejudging the case now *sub judice*, we venture to bespeak the attention of the profession and the public for a matter of daily importance, unfortunately impressed afresh upon the notice of everybody by this terrible lesson in blood.

THE CHAIR OF PHYSIOLOGY AT GLASGOW.

THE candidates already in the field for this important scientific appointment are Dr. McKendrick, and Dr. Eben Watson. The former gentleman is assistant to the Professor of Physiology in Edinburgh, and is well known as the author of many excellent original papers which have been published in the Transactions of the Royal Society, and which constitute permanent and important steps in the science to which he is exclusively devoting himself. Dr. McKendrick possesses unusual power of exposition as a lecturer, and his claim is at least deserving of all consideration by the Secretary of State whose duty it is to advise the Crown in these matters.

SIMLA.

COMPREHENSIVE and energetic efforts will shortly be made to improve the sanitary condition of Simla, the favourite resort for European invalids, civil and military, at the foot of the Himalayas. The system of drainage, long known to be defective, will be thoroughly revised, and water will be brought into the station from a distance of ten miles. It is estimated that the required improvements will necessitate a cost of at least £100,000; but it will be money well spent. The fever-stricken traveller from the plains, who gazes on the "Abode of Snow" as a veritable Canaan, will no longer be disquieted by reports that the water in Simla is as bad as that he has left behind, and that on rainy days the streets overflow with liquid sewage.

THE ROYAL COMMISSION ON VIVISECTION.

THE Royal Commission on Vivisection, which has sat every day this week, has now practically finished its labours. The report of the Commission cannot, of course, be made public until it has been presented to Her Majesty the Queen, and laid upon the table of the House. The standing and influence of the Commissioners, and the thoroughness with which they have fulfilled their duties, may be taken as a guarantee that the recommendations they make will prove acceptable to the medical profession, and not distasteful to the more sensible anti-vivisectionists.

FEVER AT CROYDON.

IN answer to the memorial of the inhabitants of Croydon, requesting that a Government inquiry should be held respecting the causes leading to the epidemics of enteric fever with which Croydon has been visited this year, the Local Government Board have instructed Dr. Buchanan to make the necessary investigation. Permission also has been sought to borrow the sum of £14,100 to extend the waterworks and furnish the town with a constant supply. Last week we announced that an important discovery had been made that the large overflow pipe of the cistern communicated directly with the sewers, and so permitted the sewer-gases to have direct access to the water of the cistern. Disgusting and disgraceful as this arrangement must be considered, it can hardly in itself be held sufficient to account for the epidemic, though drinking a water charged with sewer gas may be considered, no doubt, as a highly predisposing cause. The history of past epidemics has shown conclusively that the disease is spread by the *actual* presence of fæcal matter, specifically contaminated, in the water itself, so that we must continue to hold the opinion originally expressed by us, that the cause will be found to lie in a defective condition of the sewers and water-mains at one or more points; the contents of the former passing into the latter when the supply is intermittent.

IN a short memoir which Sir Thomas Watson has written of the late Dr. Peter Mere Latham, who had outlived nearly all his contemporaries, he states that his conduct throughout life was governed by an abiding and imperative sense of duty, and as a corollary of this temper of mind must be reckoned his love and habits of order and method. The letters received by him and kept were all arranged in packets, and the substance of each was noted on the envelope. He was a charming companion, full of various information, affluent in anecdote, with a keen sense of fun and humour, and with this was blended a quick susceptibility of pathetic emotion. "Ripe in years as he was, and ready in spirit for the solemn change, his death must long be the subject of tender and sacred regret among the nearest and dearest of his surviving family and friends; nor will his memory soon cease to be reverently cherished throughout a much wider circle.

'Multis ille bonis flebilis occidit,
Nulli flebilior quam mihi.'"

THE authorities of the *Cornwall* are unable to take advantage of the offer made to them by the Admiralty of H.M.S. *Clio* on account of the heavy attendant expenses. It is now arranged that the *Cornwall* shall be moved down to Gravesend as soon as possible, and be there thoroughly cleaned and refitted. The propriety of retaining the permanent moorings at Purfleet is still under consideration, and we are informed that the port medical officer has advised the *Cornwall* authorities to ask for an opinion from the medical department of the Local Government Board as to the possible evils likely to arise from the comparative proximity of the ship to the metropolitan main drainage outfalls. There is now so much difficulty in finding berths for ships of this class in the Thames that the removal of the *Cornwall* from Purfleet might possibly result in the breaking up of this School-ship Society.

DR. WHITMORE, medical officer of health for Marylebone, in his monthly report of the health of the district during November, observes that the deaths from bronchitis, pneumonia, and heart disease have increased with the advent of the cold weather, while scarlet fever still continues its ravages. Dr. Whitmore urges the adoption of a more efficient system of street cleansing than that now prevailing. This is a subject which might well be taken up by the vestries of the metropolis before we have another fall of snow, with the inevitable amount of mud and slush.

NUMEROUS complaints have been made within the last few months of the condition of the water-supply in Gibraltar, and the allegations of its impurity have been so persistent that samples were sent to London in order to be analysed. The result of the analysis proved conclusively that the water was unfit for consumption. We hope that, in consideration of the health of the troops in quarters, no less than of the inhabitants, the Sanitary Commissioners of Gibraltar will lose no time in devising means for securing an improved service of water.

AT a meeting of the Council of the Poor-law Medical Officers' Association, held in October last, it was resolved that a letter, signed, on behalf of the Council, by the President, Dr. Lush, M.P., should be forwarded to every holder of a Poor-law medical appointment, inviting increased support and co-operation in the effort to ameliorate the condition of the service. This letter has now been issued under the date of December 8th. The main concessions it is hoped to secure are increased emoluments, absolute instead of permissive superannuation, the development of the dispensary system throughout the country, and the payment for sanitary work called for by local boards. The Association has already succeeded in redressing some of the more pressing grievances of Poor-law doctors; it will, we trust, achieve much more in the next Parliamentary session.

THE inexactness and perversity of misapprehension of French newspapers when dealing with English manners and names are proverbial. The most astounding blunders are unfailingly made whenever the journalist is exercised on an English subject in which it is necessary to describe persons. The medical press in France cannot be congratulated on a better acquaintance with the proper names of their neighbours. Thus, we find the *Gazette Hebdomadaire* describing the late Dr. J. Hughes Bennett as *M. le Professeur Huebbenet*.

THE name of Dr. W. B. Carpenter, Registrar of the University of London, occurs amongst recent recipients of the honour of the Companionship of the Order of the Bath. This somewhat tardy recognition of the high merits and attainments of Dr. Carpenter must be gratifying to the profession of which we have the honour to claim him a member, no less than to a host of scientific friends and admirers in all parts of the world.

WE understand that Dr. Ulick Burke has been elected a medical member of the Local Government Board of Ireland, *vice* Mr. Macdonnell, who retires.

REPORT
OF
The Lancet Commission
ON
LUNATIC ASYLUMS.

HANWELL ASYLUM.

THE HOUSE AND ARRANGEMENTS.

THE Middlesex County Lunatic Asylum at Hanwell offers a marked contrast to the edifice described in our last report. It is a vast straggling building, in which the characteristics of a prison, a self-advertising charitable institution, and some ambitious piece of Poor-law architecture clamour for precedence. The gates are kept by an official who is attired in a garb as nearly as possible like that of a gaoler. All the male attendants are made to display the same forbidding uniform. Whether the justices of this county are especially proud of their livery it is not for us to determine; but, in the name of common sense and humanity, we must warmly protest against the weakness of parading it perpetually before poor creatures whose only offence is their misfortune, and whose distressing malady should deter governing authorities from obtruding what is, beyond all question, a source of irritation. County asylums are now most unwisely treated as depositories for ex-criminal lunatics, and even prisoners who have become insane before the expiry of their terms of confinement. One of these morbid miscreants in a ward will make the uniform known to the ordinary inmates, and all idea of homeliness is immediately transformed to a depressing sense of imprisonment; while that large class of lunatics who are partly insane and partly vicious instantly take to prison practices, and readily become imbued with the pestilent doctrine of criminal lunacy that, being insane, they may do wrong with perfect impunity. The Committee of Visitors are doing much to improve the conditions of life at Hanwell; it is strange that so startling a mistake as the persistent use of this warder-like uniform has not long ago been remedied. We trust the justices will at once take the matter into their serious consideration. It is one of grave moment regarded from a medical and curative, and not less from an economic, point of view. A suitable uniform might surely be devised which should be sufficiently distinctive and creditable, without adopting the sombre colour and buttoned-up appearance of the conventional prison warder.

Hanwell, as a hospital for poor persons who are neither criminals nor in the ordinary sense of the epithet "paupers," is conspicuously unsuitable. Most praiseworthy efforts have been made by the committee and the medical superintendents to adapt the edifice to its requirements, and much has been accomplished, but more remains to be achieved; and we doubt whether the enterprise is not doomed to disappointment. Practically, the asylum can never be serviceable to use as a *hospital* for any class. It may be available as a place of refuge for imbecile and chronic cases of mental disease in which safe custody is the chief requirement; but the notion of sending there acute or recent, and therefore possibly curable cases, should be wholly and at once abandoned. Speaking generally, the house is five, and the number of inmates three, times as large as the space or community of a hospital for acute mental disease ought ever to be. The immediate and inevitable consequences of this fault are extremely serious. To begin with, it has been deemed necessary to appoint *two* medical superintendents. This division of the medical management has the effect of leaving the ordinary control of the institution to a third authority—the committee and its officers. The result is disastrous. It seems to be forgotten that a hospital for patients affected with mental disease has scarcely anything in common with a hospital for physical disease. In the latter, no doubt, medical and surgical treatment may be separated from the ordinary house management, because the materia medica, therapeutic agents, and methods and appliances of treatment generally, are capable of being separated from such matters as housing, feeding, clothing, and domestic *régime*. But these very matters are *themselves* the drugs and curative agents of the physician who undertakes to treat mental disease. The use of ordinary medicines, which are the principal remedies for disease of the body, are only exceptional and accidental agents in the treatment of disease of the mind. It is by domestic control, by the surroundings of a daily life, by such devices as the colouring of walls, the patterns of floorcloth, the furniture and decoration of rooms, by the influence of pictures, birds, and draperies, the judicious use of different kinds of clothing, suitable occupation and diversions, and, generally, by moulding and controlling the routine life of a lunatic, the psychologist hopes to reach, capture, and re-educate the truant mind, and perhaps re-seat the dethroned intelligent will of his patient. No lay committee can possibly be competent to interfere in these matters. It is essential that there should be only one head to an asylum, and that the whole control of the administration should be gathered up in the *medical* superintendent. Even the authority of a matron, if she be more than a housekeeper, must detract from the personal influence of the medical superintendent with his patients and embarrass his treatment. It would be just as reasonable, or unreasonable, for the lay officials of an ordinary hospital to prescribe the drugs or the instruments with which physicians and surgeons treat physical disease. We think it right to speak strongly on this point, although it is quite possible the medical superintendents at Hanwell may not be prepared to endorse our opinion. The evil apparent in

this institution is one of growing magnitude elsewhere, and until justices have the moral courage to place these gigantic institutions on a proper footing, the fact that they are failing in their duty to the insane, and to the ratepayers—because the speedy cure of curable cases is the only true economy—must be brought plainly home to committees and the public. Then, again, it is manifestly impossible the 1700 or 1800 lunatics and imbeciles huddled together in an asylum like Hanwell can be properly cared for. We do not believe there are now cases improperly detained at this asylum, but the evil is quite likely to occur at an institution of such magnitude. Sane individuals may be overlooked in the crowd even by medical officers earnestly and devotedly striving to discharge their public duty. Let anyone calculate for himself how much time a medical superintendent can possibly give to 900 or 1000 patients, the larger number of whom probably stand in need of direct personal and daily assistance. To devise a system of general routine, be it ever so well-ordered, and place a mass of patients under common discipline, is practically to let them take their chance of recovery. This was the highest notion of mental treatment some twenty years ago, but it is not now. As well might the ordinary physician give general directions that all patients suffering from pneumonia should be dosed with tartar emetic, or all the victims of phthisis imbibe large quantities of cod-liver oil. Pulmonary gangrene and hæmoptysis would probably flourish in a hospital so conducted, but it would be idle to pretend that any serious or scientific attempt was made to cure diseases. Mental disease is peculiarly varied in its symptoms and nature, and its victims are remarkable for their idiosyncrasies. Individual knowledge and special treatment are indispensable. Both are impossible in places like Hanwell Asylum. If here and there a case is specially studied and treated, it must be to the neglect of others. A wise and provident Board of Justices will lay these common sense and practical considerations to heart, and carry out the reform to which they point.

Long cold corridors, huge wards, and a general aspect of cheerlessness, are the unavoidable characteristics of a building like Hanwell Asylum—an ungainly multiplication of regulation day-rooms, dormitories, and single rooms, which might be useful as a barrack, but should long ago have been discarded as a residence for the insane. Nevertheless, taking the place as it stands, it is impossible not to be struck with the effort, on the whole much more successful than might have been anticipated, which has been made to render it comfortable. The wards have been improved constructionally wherever it was possible; the walls have been painted, papered, or stincelled; the old stone floors have been replaced with wood; and the stable-like windows have been cut down. All this has been accomplished at great expense and with considerable liberality. Pictures, plants, tasteful ornaments, books, and musical instruments have been provided, and at every turn it is a labour of love to notice the ingenious contrivances for the comfort of the inmates, which have been introduced by the combined intelligence of the superintendents and the spirited humanity of the Committee of Visitors. Nothing can render the asylum a pleasant place to inhabit, or redeem its inherent ugliness. Nothing short of entire reconstruction could make its day-rooms really homely, its dormitories cheerful, or its airing-courts anything but sad and prison-like. Meanwhile what has been done in the way of improvement is very remarkable, and reflects high praise on skilful workmen labouring with defective and unworthy tools.

It is needless to describe the building in detail. Let it suffice to say, briefly, that the house, the arrangements, the general routine of checks and counter-checks, are as complete as those recorded to the credit of Brookwood, with some points to the good. For example, there is an abundant water-supply obtained by sinking an artesian well; the provisions against fire are ample, there are hydrants on all levels, and electric alarm-bells from every ward and officer's room to a common centre; details have been considered down to the placing of a small filter in each dormitory. On the other hand, there is no provision for separating special working communities, which has proved so useful a feature of the arrangements at Brookwood; and the possibilities of isolation in case of epidemic disease, except by some temporary erection, are *nil*. If the Commissioners in Lunacy would concentrate their counsel on points like this, instead of wasting power in recommendations so wonderful as that for "a separate and suitable deadhouse for *each sex*," a real need might be satisfied. As it is, we dread to contemplate what might happen if a serious outbreak of fever or small-pox occurred. There is a recreation hall, but it is much too small, and the system of entertainments is not sufficiently developed. The powerful and most salutary aid of theatrical representations, so well calculated to arrest and interest the wandering mind—perhaps more efficacious than any other instrumentality,—is practically neglected. This is a subject for great regret. The chapel is a vast and gloomy apartment, very like an overgrown meeting-house, which it must be the reverse of comforting to attend. The wise course would be to throw this and the awkward small recreation-hall into one, erect a new and improved stage and dressing-rooms, and build a commodious chapel somewhere in the grounds. At the same time, a block of residences on the cottage principle, here and there, to be used as hospitals for curable cases, or in time of need for infectious diseases, would be worth many hundreds of pounds a year to the county treasurer on the general expenses. We have already spoken of the folly of clothing the attendants in prison uniform. It would be advantageous if the attire of the inmates were more diversified in colour and material, particularly on the female side, where a little pride in dress might obviate the need of special measures to prevent the wilful destruction of clothing. The dietary is good and varied; it includes a liberal supply of vegetables and fish. The daily life of the patients is well ordered, and they appear as contented and quiet as the mistaken policy of associating large bodies of persons with unnaturally excitable temperaments in a ward will allow. The service of the attendants—always a point of the first moment, but extremely difficult to infer from appearances—would seem to be fairly satisfactory. The proportion of attendants is about one to thirteen patients, exclusive of inspectors. The system of night-watching is reported to be good, but it is hard to understand how the large dormitories and multitude of single rooms can be properly supervised. A passage in the latest report of the Medical Superintendent of the Female department bears on this point. "The question of the constant supervision of the epileptic patients by night has engaged my most earnest consideration for some time past, but I have been reluctantly compelled to come to the conclusion that in our present building it would be impossible to attain that object in its entirety; the difficulty arising from the large number of epileptics we have in the asylum—viz. 124; and of them 20, on the average, must sleep in single rooms, on account of their violent and irritable disposition." We must confess to having very little confidence in the check imposed by "tell-tale" clocks. Those who have had much to do with the insane will agree that it is always more difficult to watch attendants than patients. The weekly cost of inmates is 9s. 11d. per head. The sewage is utilised, and the farm productive. The drainage is generally good. The warming of a large building like this is of course a work of difficulty: open fireplaces are general and approved. The grounds are not sufficiently planted, and the airing-courts look dismal and bald: many of the seats have no backs. There is plenty of scope for the energy of reform in the provisions for recreation, both in-door and out. Notwithstanding the immensity of the asylum, there is a tendency to overcrowding, and in many of the day-rooms and dormitories both cubic atmosphere and superficial space for exercise are very deficient.

TREATMENT.

The general principles of treatment adopted at Hanwell are no doubt identical with those in operation at Brookwood, but the practice is in many respects essentially different. It is humane, intelligent, and, in the broad sense, moral and suasive; but it necessarily lacks individuality, and that special character which arises from dealing with a limited number of cases directly. The medical attendants do not approve the use of mechanical restraint, except for surgical purposes; but "seclusion" has been, and still is, an acknowledged remedy at Hanwell, and although it has of late been employed less frequently than in former years, it forms an integral part of the discipline. During the last ten years the records of "seclusion," summarised as completely as we can ascertain the facts, are given in the following table:—

In 1865 there were	96	cases, comprising	193	instances.
„ 1866	„	72	„	„	186	„
„ 1867	„	68	„	„	116	„
„ 1868	„	61	„	„	85	„
„ 1869	„	36	„	„	53	„
„ 1870	„	85	„	„	159	„
„ 1871	„	120	„	„	244	„
„ 1872	„	48	„	„	76	„
„ 1873	„	62	„	„	127	„
„ 1874	„	10	„	„	19	„
		558			1258	

The above is only an approximation to the actual figures; the returns of seclusion in the female division being deficient for the years 1869 and 1872. It will, however, be seen that the practice is rapidly falling into disuse; and the following remarks, which we reproduce from the Medical Report issued in January of the present year (1875), will show that this is due to change of policy rather than to any supposed variation in the type of disease. Mr. J. Peeke Richards, the medical superintendent of the females, says:—

"Three patients have been secluded on three occasions, two of them being excitable epileptics. ..... During the previous year the seclusions were as follows: 51 patients secluded on 110 occasions. ..... By this it will be seen that the seclusions have materially diminished; and this has been due, I think, in great measure, to further extending the plan that has been adopted here for some time past, and which the large size of our building and the number of our wards freely permit us to do—viz., that of removing the patient, when excited, to some other ward, thus removing her from her real or imaginary grievance or source of irritation; she then, as a rule, soon becomes quiet, and after a few hours returns to her own ward calm and tranquil."

The method thus indicated is in use elsewhere, and with the same beneficial results. Dr. Henry Rayner, medical superintendent of the male division, remarks:—"Five patients have been secluded once, one twice, and one thrice; making a total of seven persons secluded on ten occasions. ..... Six of the patients secluded were epileptics, and the seventh a general paralytic. By the experience of the last year I am strengthened in the opinion expressed in my last year's Report, that seclusion is only very exceptionally a necessity."

The shower-bath is not, we are assured, employed except for ordinary physical purposes; never as discipline.

The result of a very careful inquiry into the treatment is to leave the impression that Hanwell has within the last few years emerged from a period of darkness and empiricism and entered an era of scientific progress and enlightenment. The trust to physical remedies is no less diminished than the reliance upon mechanical appliances and methods of restraint. Sedatives and stimulants are going the way of strait-waistcoats and padded rooms. In a word, the treatment is becoming more essentially moral. The difficulties which psychologists doomed to labour in a building like the asylum at Hanwell, and with attendants dressed as prison warders, must encounter and contrive to surmount, can scarcely be over-estimated, and it is only due to the medical superintendents to recognise the conditions under which they labour and the obstacles by which their daily practice is beset. The increased attention to matters of detail, relating to the more intractable and hopeless classes of cases, which recent medical Reports evince, is a satisfactory token of improvement in the general management. The care of "wet" and "dirty" cases is more efficient; the provision of suitable employment for those who can be induced to work—a task of great perplexity—is calling forth better effort, and the result is a larger proportion of patients voluntarily employed—some 60 per cent. in 1874, showing an increase of 10 per cent. on the previous year 1873. Dr. Rayner's class at the Middlesex Hospital visits the asylum for clinical instruction, and while this is a boon of considerable magnitude to the pupils, it beyond question reacts advantageously on the practice of the institution. Hospitals of all descriptions are improved by being used as schools of medicine; and, under proper restrictions—for example, the obvious one of *prohibiting students from entering the wards or showing themselves to the patients except when accompanied by one of the medical superintendents*—the attendance of pupils at an asylum for lunatics is certain to elevate and improve it. The obligations of hospital practice and the emulation of success it implies, must go far to redeem asylums from the character of mere retreats and strongholds for the subjects of madness to drag out hopeless and unhelped lives, and finally die, in.

RESULTS.

The figures in the annexed table are compiled and arranged as were those in the previous report. They speak for themselves. The cases deemed curable—by the medical superintendents for the time being to which the numbers relate—have borne a proportion of 36·76 per cent. to the total of admissions, taking the aggregates of the ten years, not the mean. The mean proportion per cent. of cures to cases "deemed curable," adding the number of such cases remaining at the close of one year to those admitted in the course of the next, has been 53·38. Our reasons for attaching more weight to this calculation than to that which compares the "recoveries" with the "admissions," without regard to the proportion of cases "deemed curable" among the latter, were stated in the last Report. The proportion per cent. of deaths on admission has been 46·27.

Middlesex County Lunatic Asylum at Hanwell.

Year.	Cases admitted.				Cases discharged.				Cases remaining on Dec. 31st.		Average number resident.	Analysis of recoveries.				Analysis of deaths.						Casualties reported.
	Total number.	Transferred from other asylums.	Readmitted.	Deemed curable.	Recovered.	Relieved.	Not improved.	Died.	Total number.	Deemed curable.		Proportion per cent. on admissions.	Proportion per cent. on cases deemed curable.*	Proportion per cent. on average number resident.	Number, within six months of admission.	Proportion per cent. on admissions.	Proportion per cent. on average number resident.	Immediate cause: General Paralysis.	Average age at death.	Number, within six months of admission.	By suicide or accident.	
1865	466	22	28	148	111	35	8	203	1693	108	1643	23·81	40·51	6·95	51	43·56	12·35	49	49	57	1	...
1866	349	11	28	100	103	22	21	168	1723	96	1708	30·94	51·92	6·32	49	48·13	9·89	37	49	47	2	...
1867	344	19	34	100	102	37	28	177	1723	79	1727	29·65	52·04	5·90	38	51·45	10·24	41	48	51	3	...
1868	265	19	18	90	95	26	74	105	1698	75	1710	35·84	56·21	5·55	37	39·62	6·14	22	49	23	2	...
1869	321	8	25	108	95	14	27	175	1698	60	1716	28·13	51·91	5·53	36	54·51	10·19	47	49	56	3	...
1870	423	32	31	194	119	16	19	182	1785	45	1776	27·31	46·85	6·70	42	43·02	10·25	48	51	45	3	...
1871	545	140	95	178	127	15	213	178	1797	61	1759	23·3	56·95	7·22	42	32·66	10·11	55	52	40	3	...
1872	301	53	28	128	112	17	18	144	1807	42	1792	37·21	59·25	6·25	41	47·84	8·03	40	50	37	2	1
1873	380	70	27	172	118	18	21	201	1829	96	1915	31·05	55·14	6·50	48	52·81	11·07	58	48	37	2	2
1874	305	37	21	142	150	14	7	150	1813	88	1835	49·18	63·02	8·20	66	49·18	8·21	36	53	40	1	2
...	3699 †	411 †	335 †	1380 †	1137 †	214 †	436 †	1683 †	...	...	1747	31·64	53·38	...	450 †	46·27	...	433 †	...	433 †	22 †	5 †

* This percentage is upon the total of cases deemed "curable" remaining on Dec. 31st of the previous year (11th col.) and those admitted during the current year (5th col.)

† These totals are the gross of the ten years, not the average.

General paralysis accounts for 433 out of the 1683 deaths, or 25·72 per cent. on the gross total of the ten years. We reserve general deductions until the close of our inquiry. To Mr. J. Peeke Richards and Dr. Henry Rayner, the able superintendents, whose difficulties are great, but whose zeal is apparent, we are indebted for much courtesy and valuable information.

[*Errata in the Report on Brookwood Asylum*, December 4th, 1875.—In the section on "Treatment," ninth line, for "daily dealings with the sane," read "daily dealings with the insane." In last paragraph under same heading, fourth line, for "broodings phantasies" read "brooding phantasies." In the section on "Results," the proportion per cent. of deaths caused by general paralysis upon the total of deaths for the eight years should be 31·04 instead of 31·4.]

DR. RICHARDSON'S LECTURES ON INDUSTRIAL PATHOLOGY.

I.

THE lectures on industrial pathology now being delivered by Dr. Richardson before the Society of Arts are an instance of the anxiety which the Council of that Society feels to advance scientific inquiry on subjects of every-day life, and of practical utility to the masses of the people. In appointing Dr. Richardson to the lectureship, the Council requested him in the present course to take up that part of the subject of industrial pathology relating to those members of the community who belong to the industrial classes proper—to the classes that are engaged in the production of some article of manufacture. The lectures are consequently limited to one class, but incidentally they do, by necessity and by way of comparison, introduce many facts bearing upon other classes of the community. Our contemporary the *Daily News*, which is taking a great interest in this effort, correctly states that the inquiry now in progress is but a preliminary to the greater national inquiry which the Government of this country must undertake, when the *sanitas sanitatum* is in truth more than a party word, spoken but not fulfilled. It is, of course, impossible for any private society to carry out a Government measure, and this is not the attempt that is now being made. At the same time the attempt is not less worthy of regard. It is intended as a means for drawing public attention and interest towards one of the most important of national subjects. It is a means for educating the people so fairly that the demand for official investigation and action shall be irresistible. The plan is eminently practical, and is specially illustrative of the mode of political progress in this country. It has, moreover, an additional advantage of no mean value: it helps to educate professional teachers in the soundest practical knowledge, and thereby to train men of science to take part in the governing body of the nation if their inclinations be in that direction.

In the first or introductory lecture of the course delivered on the 3rd inst., Dr. Richardson first called attention to the previous action of the Council of the Society of Arts in respect to the subject of Industrial Pathology. He drew special attention to an able report and series of questions which had been drawn up twenty years ago by Mr. Simon, F.R.S., Dr. T. King Chambers, and Mr. Twining. Next he dwelt on certain of the detailed reports which had been drawn up by various Governments, naming the Factory Acts Commission, the Children's Employment Commission, the Sanitary Commission, and the great work which has been conducted in the Registrar-General's Office, and in which the labours of Dr. Wm. Farr play so conspicuous a part. The reports of Dr. Headlam Greenhow were also noticed as of signal value. On the whole, the lecturer held that our Governments, with all the faults that had been attributed to them, were deserving of this credit—that they had taken the lead of the Governments of all other countries in the work of sanitary science. Since the year 1802, when factory legislation commenced here, the progress of sanitary science had steadily gone on, until the best system of sanitation with the best results of action was established. In a word, England, the birthplace of true sanitary science, was still the leader. The reading of a quotation from a Belgian publicist on the credit due to England closed this section of the discourse.

Under a second head the lecturer considered the classes of the English community on which it was his duty to treat. Following the Census return of 1871, he defined the six great classes of the English community:—1. The professional, including the governing class, the army and navy at home, and the representatives of the learned professions, literature, art, and science. 2. The domestic class, including all wives and women of the household, hotel-keepers, inn-keepers, and all who provide entertainments. 3. The commercial class—the buyers, sellers, and lenders. 4. The agricultural class—the tillers of the soil and keepers of the live stock, and of all animals that minister to the wants of man. 5. The industrial class—those who live and work to produce some useful thing. 6. The indefinite class, including (*a*) those who are truly indefinite, who have no fixed home, and no returned and recognisable labour; (*b*) those who are independent, who are *par excellence* "ladies and gentlemen," and (*c*) those who, being under fifteen years of age, are the coming England—the children, scholars, and students of our present generation.

The 22,712,266 persons who made up the whole of the last census were thus divided into classes:—The professional class made up 684,102 of these; the domestic class, 5,905,171; the commercial, 815,424; the agricultural, 1,657,138; the industrial, 5,137,725; and the indefinite non-productive class, 8,512,706. In commenting on these divisions into classes, Dr. Richardson specially dwelt on one singularly curious fact—a fact which shows what a busy beehive this country is—namely, that of the whole 22,712,266 persons who make up the population no more than 168,895 adults are returned as of independent means, and as following no occupation, as, in short, "ladies and gentlemen." The rest are all of some occupation.

Under the third head of the lecture, the 5,137,725 people who constitute the industrial class were considered specially in respect to their diseases and vital condition. It was impossible, the lecturer urged, to study the true industrial pathology of this class until certain disturbing influences, which did not rank strictly as the effects of occupation, were well understood. Five great influences were at work to reduce the life value of the industrial classes, independently of the effects of occupation, and these were: (*a*) intemperance; (*b*) heredity to disease; (*c*) errors of diet, and improper cooking of food; (*d*) moral surroundings; (*e*) uncleanliness.

In illustration of these different disturbing influences, the lecturer adduced a long series of facts. Under the head of intemperance, and the results arising from that cause, he held that, although intemperance is a source of disease and of premature death amongst the industrial classes, it is less destructive to them than it is to some other classes; so that there were occupations, which in all other respects were more favoured, in which the mortality was greater. To prove this position, Dr. Richardson compared two of the unfavourable industrial occupations with that of the publican. The industrial occupations selected were the blacksmith and the engine-driver and railway servant. Taking the mortality of these from the returns of the Registrar-General, and adding to them, in order to make the comparison more complete, the mortality of labourers and of persons of all ages, he showed that the annual death-rate per cent. of the publicans was greater than that of all the rest, at every period of life from above fifteen to seventy-eight years. The facts bearing upon this point were largely illustrated, and are condensed in the following table:—

	Years of Life.						
	15-25	25-35	35-45	45-55	55-65	65-75	75
All Classes	·739	·985	1·305	1·853	3·215	6·076	16·384
Labourers	·513	·872	1·080	1·507	2·734	6·000	18·256
Blacksmiths ...	·306	·918	1·124	1·869	3·225	7·138	19·254
Engine-drivers and Railway servants.....	·712	1·121	1·407	2·151	4·059	7·092	20·543
Publicans	·957	1·449	2·044	2·869	4·303	7·465	21·792

It is seen from this table that the men who are engaged in the dispensing of alcoholic drinks, and who are, almost by necessity, led to indulgence in such drinks in small and

frequently repeated libations, are from the beginning to the end of their careers specially stricken down with disease, the fruit of their intemperance. These men, in fact, stand in relation to mortality above every one of the industrial classes except one, which is exposed to other dangers of singular import. The lesson taught by the facts requires no comment.

To what extent the same trains of evil extends amongst the industrial classes was not so easily defined, but in its less definite form it was traceable through all the ranks.

The second disturbing cause leading to excess of mortality, irrespective of occupation—viz., inherited disease, was a serious influence, extending specially in those localities of the industrious where the population is densest. Pulmonary consumption is the most marked of these transmitted maladies, but others were named, such as rheumatism, and its concomitants, heart disease and paralysis. Cancer is less prevalent and less distinctly hereditary amongst the industrial than it is amongst the agricultural, the domestic, and the professional classes. A question of immense moment was here considered — whether the transmitted diseases, acquired from the occupation by some of the industrial community, could become hereditary in their offspring independently of the occupation of the offspring?—in other words, whether the original disease once induced by a purely external cause in one person could reappear in the direct line of the family of that person without exposure to the original, or any other similar exciting external, cause? Many difficulties lie in the way of obtaining a correct answer to this question, but Dr. Richardson was of opinion that the balance of testimony lies on the affirmative side.

The third disturbing element, arising from errors of diet and imperfect preparation of food, formed a striking topic in the lecture. As a rule, the industrial classes take too little nitrogenous food, while they often take also an imperfect respiratory sustenance. Absence of fresh food is a great evil, and indulgence (if such a term may be allowed) in tea by the female portion of the class is a serious cause of mischief. The food is not only badly selected as to quantity and quality, but it is so badly cooked that half its value as a sustaining and digestible substance is lost. In some exceptional localities errors of diet of a luxurious kind prevail. In Wolverhampton, during the days of the week which are devoted to "play," the miners feast on all the luxuries of the season. But these exceptions are rare; and, on the whole, one of the greatest reforms required amongst the members of the industrial community is in their diet and in their system of cooking. Peculiarities of body and mind, that are all but racial in their distinctiveness, rest on food and its preparation.

The fourth disturbing element—the moral influences which surround the workman—exert a telling effect on the vital value of the working class. The agricultural labourer may work hard, may fare badly, may be housed shamefully, but he has many advantages. He is engaged out of doors in the fresh air, he has all the beauties of the external nature to delight and refresh him. His work is varied; there is the spring-tide season, with its sheep-washing and shearing; the summer with its haytime; the autumn with its harvest; the other months of ploughing and sowing—constant roundelay of work, with varied change for the mind as well as the body. The artisan has no such pleasures of industry. He passes day by day, month by month, year by year, through the same monotonous labour, until at last his mind recognises but one scene, his hands fall to but one automatic routine. To the end of his career he sees no change, nor chance of being made independent by his skill and his industry. He therefore is naturally apt to become fretful, anxious, irritable; the victim of smouldering passions, which wear out his heart, and lessen his nervous resistance to the many external shocks to which he is daily subjected. Moreover, the limitations of his means lead to limitations in the necessary comforts of his home, and he who is in these straits is rather to be pitied than blamed when, in false measure of the deed, he seeks, ignorantly, still more sorrow in alcoholic indulgence.

The fifth disturbing influence, uncleanliness of person and of attire, was the last dwelt upon. Much of the uncleanliness in industrial work is a part of the industry, and must be accepted as a necessity. But uncleanliness begets the habit of uncleanliness, and so much more is added than need really exist, and it is common to retain the uncleanly condition during hours when work is not being carried on. Dr. Richardson showed the injurious effect of this habit by reference to those who are engaged in working lead, as dippers in the glazing of pottery, and painters. These artisans get into the habit of taking food before they have thoroughly cleansed their hands. They lift some portions of the food—bread for instance—to their mouths with their hands, and in this way they actually swallow the poisonous lead, and become affected, not as is commonly supposed, by absorption of the poison through the skin, but by absorption of it from the stomach.

The last division of the lecture treated upon the actual dangers which spring from various industrial occupations, and which are inseparable from them. It was shown in this part, from the mortality incident to industrial pursuits, that there are causes at work in many of them which, over and above the disturbing influences already quoted, lead to depreciation of vital power and existence. From a table exhibiting the annual rate of mortality in twenty-five well defined callings it was shown, that amongst the industrial callings, the earthenware manufacturers hold the worst place.

As the topics now under consideration opened, it would be discovered that many of the causes operating against industry were irremovable by science in her present condition; that others were removable if science were backed by legislation; that many were easily removable by science without any legislation if those who are most interested in such removal would permit the required improvements. Some advance of opinion among the workers has taken place within the last few years, but it will be long before all opposition to sanitary reform is withdrawn. Dr. Richardson concluded the lecture by quoting one of the "feircely pathetic" passages of the Corn-law Rhymer on this indifference of the industrial worker to the good gifts of science.

HEALTH OF THE NAVY.

THE Medical Director-General, true to his word, has this year given to the public his statistical report at a much earlier period than formerly, and we have now before us the particulars on this subject for the past year, which have just been issued. Deputy Inspector-General A. E. Mackay, M.D., who is personally responsible to the Director-General for the compilation of the report, shows a very satisfactory sanitary return as compared with previous years. The total force under consideration numbered 44,530 men, who produced a total of 53,286 cases of disease and injury, which is at the ratio of 1196·6 per 1000, being a reduction compared with the preceding year equal to 3·5 per 1000. A total of 1745 men were invalided, and 422 deaths occurred, this latter number being an increase, compared with the preceding year, equal to 1·1 per 1000, which increase was caused mainly by a fatal outbreak of yellow fever on the south-east coast of North America in May and June of last year.

In summarising the specially interesting features of the Report, it is found that the advantages derived from the operation of the Contagious Diseases Acts continue to be maintained. A table is given in the Report showing the decrease in the ratio of cases of those diseases against which the Acts are more particularly directed, from the year 1864, when they came into operation, to the year 1874, as compared with the ratio of the three years preceding—namely, 1861 to 1863 inclusive. From this table it will be seen that the ratio has been reduced from 104·4 per 1000, the average which obtained from the year 1861 to 1863 inclusive, to 56 per 1000, the average ratio for the years 1866 to 1874 inclusive. In 1874, the ratio of disease was 48·6 per 1000, as compared with 104·4, the average ratio for the three years before the Acts came into force. These statistics need no comment, but may advantageously be commended to the attention of Mr. Stansfeld.

Enteric fever occurred as usual to some extent in the Mediterranean squadron, nearly all the cases originating at Malta. As, however, a general and comprehensive scheme of sewerage for the entire island has been planned, and is

about to be carried out, it is very probable, as Dr. Mackay in effect observes, that these works will result in a diminution of this disease among the squadron.

The North American and West Indian squadron has been, comparatively speaking, free from yellow fever during the past year, thus causing a reduction in the death-rate of that station to the extent of no less than 7 per 1000. The fatal outbreak of this disease, however, alluded to above increased the death-rate on the South-east Coast of America station to the extent of 26·1 per 1000, the cases being almost entirely confined to the receiving ship permanently stationed at Rio de Janeiro, thus giving one among many other examples of the unwisdom of keeping vessels at permanent moorings in a tropical climate for any length of time.

The operations on the West Coast of Africa and Cape of Good Hope stations in connexion with the Ashantee campaign were, of course, productive of much invaliding, but nevertheless the ratio of cases entered on the sick-list, as well as the actual mortality, were less than in the previous year. The sanitary condition of the East Indian, China, and Australian stations does not call for special comment. Besides the usual medical and surgical reports from the surgeons of the Royal Dockyards, Naval Hospitals, and Lunatic Asylum, the Report contains Notes and Statistics relating to Boys under Training for the Royal Navy during the past year, by Staff-Surgeon Peter W. Rolston; a Report on the Physical Condition of the Royal Marine Light Infantry, by Surgeon Henry C. Woods, M.D.; some Spectroscopic Observations on certain Pathological Absorption Spectra, by Surgeon E. L. Moss, M.D.; and a most interesting and exhaustive chapter by Staff-Surgeon A. B. Messer, of H.M.S. *Pearl*, on the Physical Geography and Climatology of the Fiji Islands, an abstract of which we must reserve for a separate and prominent notice.

Correspondence.

"Audi alteram partem."

SANITARY WORK IN INDIA.

To the Editor of THE LANCET.

SIR,—Will you kindly afford me space for the following reply to Dr. Macnamara's letter in last week's LANCET on this subject:—

1. Dr. Macnamara has stated his own view that the old high death-rate of the Indian army was mainly due to field service, and doubts the conclusions arrived at by the Royal Commission on the sanitary state of the Indian army after an inquiry extending over several years, and carried on not only in England, but at every station in India, during which there was a concurrence of opinion manifested as to the causes that led the commissioners to adopt the conclusions they arrived at, and of which Dr. Macnamara's own view is not one; and all the sanitary work which has been done in India has followed from the principles laid down by the Commission. On this matter the facts must be left to speak for themselves.

2. Dr. Macnamara's estimate of the sanitary results of sending young fellows to India would, I am afraid, not be sustained by many other authorities, as these very young fellows have been claimed by statistics as among the causes of increased mortality and invaliding; moreover, they supply the chief victims for typhoid fever. Some years ago the matter came before us, in conjunction with the Army Medical Department, and we felt it to be our duty to object to young recruits.

3. Dr. Macnamara appears to place some weight on increased invaliding as a cause of lower death-rates, and cites the experience of 1868 (for Bengal?) with an invaliding rate of 67·7 per 1000, and a death-rate of 21·71 per 1000. The results for all India in 1873 may be compared with Dr. Macnamara's figures. The total invalids were under 40 per 1000, including about 600 men who recovered their health in a month's voyage, and never went to Netley. The actual invalids who went to Netley were under 30 per 1000. The final loss by discharge was 10·3 per 1000, and the total death-rate, including those who died at Netley, for the Indian army, 15·8 per 1000, to which the invalid deaths contributed 5 per 1000, leaving the deaths in India 15·3 per 1000 in that year.

4. In regard to the question of water-supply, Dr. Macnamara appears to consider that the Army Sanitary Commission should have dealt with this subject on the basis of disease poison. But, as I have already pointed out, the Commission, as a purely practical body, is bound not to interfere with doctrine, except to take practical good out of it. Besides, these views are by no means generally adopted in India, and it is scarcely our duty to decide such questions, although we by no means undervalue their teaching. We entirely concur, however, on the Mussack question, and have set our faces against this practice from the beginning. No water, however pure, can be safely carried in skins. At a number of stations metal vessels have been lately substituted. It is true, as Dr. Macnamara states, that several Bengal stations require permanent works, but it is something to have got the Presidency stations improved, and at others there has, I believe, been much good work of a temporary kind done in drainage and water-supply, and at all the conservancy has been undergoing improvement.

5. Dr. Macnamara states that the condition of the civil population of Bengal has not improved, and that in some respects it has degenerated (referring to the fatal Burdwan fever district). Now let us see what the Sanitary Commissioner for Bengal says in his report for 1874. "Very great advancement has been made in the sanitation of municipal towns during the year. The famine has largely extended, in a most practical manner, a knowledge of what is needed and how it can be done"; and he cites reports of improvements from country districts also, in cleansing, draining, filling up holes, improving the water-supply, &c., on a considerable scale. The Burdwan fever has for years been a subject of representation by the Commission with the view to improve the drainage, agriculture, and water-supply, and also the sanitary state of the villages. The difficulties were very great, but a beginning has been made. As a point of experience it may be stated that the same report mentions that in Hooghly district extensive drainage works were completed during the year, "and the result is that a large tract of the country, which was formerly the centre of much disease and mortality, has become healthy." We hope that the same result may be realised, before many years are over, for the whole region.—Your obedient servant,

London, 14th December, 1875. JOHN SUTHERLAND, M.D.

UPPINGHAM SCHOOL.

To the Editor of THE LANCET.

SIR,—I understand that the Rural Sanitary Authority at Uppingham has sent you a resolution about the school. I should be obliged if you will publish at the same time with it, or in your next issue, if it has already appeared, the letter from Mr. Robert Rawlinson, who has been appointed by the Government Board at Whitehall to decide on the whole question. Mr. Rawlinson wrote this letter on having the resolution from Uppingham put before him. I enclose a copy. Believe me, yours faithfully,

EDWARD THRING.

The School House, Uppingham, Dec. 10th, 1875.

"UPPINGHAM SCHOOL.

"Local Government Board, Whitehall,
"December 9th, 1875.

"DEAR SIR,—I have not yet seen the plans, reports, and estimates of Messrs. Rogers Field on behalf of the Rural Sanitary Authority, and of Mr. Tarbotton on behalf of the school's trustees, and until I see these, and report, it is premature to publish any statement relative either to the state of the town or the state of the school.

"I am yours truly,

"The Rev. Edward Thring." "ROBERT RAWLINSON.

*** We insert the above letters at the request of the Rev. Ed. Thring, the Head Master of Uppingham. The resolution referred to appeared in our columns last week: it was to discountenance a premature return of the scholars till the Sanitary Authority at Uppingham were able to report that "each individual house in connexion with the school is in a perfect sanitary condition." We do not see that these letters in any way affect the resolution in question, which seems to us, under the circumstances, both reasonable and prudent.—ED. L.

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen, having passed the required examination, were admitted Licentiates in Midwifery at a meeting of the Board of Examiners on the 15th inst.:—

Benton, Samuel, M.R.C.S., Wakering Hall, Essex.
Blake, Andrew H., M.R.C.S., Drury-lane.
Burgess, Edward John, M.R.C.S., Brentwood, Essex.
Hosford, Thomas Stroud, M.R.C.S. Mornington-road.
Jevers, Eyre, M.D., Tonbridge, Kent.
Pickburn, Thomas John, M.D., Sydney, New South Wales.

It is stated that nearly 350 candidates have entered their names for examination in general knowledge for the Membership and Fellowship of the Royal College of Surgeons, a number quite equal to that of any previous year. The examination will commence on Tuesday next (Dec. 21st) at the University of London (Burlington-gardens).

APOTHECARIES' HALL.—The following gentlemen passed their examination in the Science and Practice of Medicine and received certificates to practise on Dec. 9th:—

Bickford, William, Ashburton, Devon.
Carey, John Thomas, Trinity-square.
Cross, Philip Henry Eustace, Lancaster-road, Notting-hill.
Heubeck, Fredk. Emanuel, Westbourne-terrace North.

The following gentlemen passed the Primary Professional Examination on the same day:—

Henry Thomas Batchelor and Robert Godfrey White, London Hospital; John Walter Stamp, Queen's Hospital, Birmingham; Joseph Henry Marsh, St. Thomas's Hospital; Alfred Moxon Turner and Walter Henry Lawrence Welchman, Guy's Hospital.

VALENTINE STONE, Esq., F.R.C.S. Edin., has been appointed a Justice of the Peace for the county of Kincardine.

BRITISH MEDICAL DEFENCE ASSOCIATION.—At a general meeting of the members of the British Medical Defence Association, held on the 10th inst., Dr. B. W. Richardson was elected president for the ensuing year, Dr. Alfred Meadows and Mr. James R. Lane, F.R.C.S., were elected vice-presidents, and Mr. George Brown was elected honorary secretary. An adjourned meeting is to be held on Tuesday afternoon next at the Guildhall Tavern, Gresham-street, to elect the council and remaining officers of the association.

LONDON HOSPITAL MEDICAL SOCIETY'S SOIREE.—The soirée of the London Hospital Medical Society was held in the Medical College on Friday, the 10th inst. By the kind permission of the council the greater part of the ground floor was in use. The Anatomical, Pathological, and Materia Medica Museums, which were used as a promenade, had numerous curiosities and objects of interest displayed in them. The Reading-room was devoted to microscopes, stereoscopes, and photographic views. In the Anatomical Theatre a good selection of glees and solos were admirably performed during the evening, and some recitations given with great success. A large number of lime-light views were shown in the Chemical Theatre, thanks to the kindness of Dr. Tidy, who placed the necessary instruments at the disposal of the committee. Refreshments were provided in the lecturers' room. The rooms were crowded, many strangers and neighbouring medical men being present, together with a large number of the members of the society, and all seemed much pleased and interested by the entertainment, which lasted from seven o'clock to half-past ten, and the only cloud upon which was the serious indisposition, and consequent absence, of the President, Mr. Mercier.

Medical Appointments.

BAIRD, Mr. J., has been appointed a Midwifery Assistant at the Steevens's Hospital, Dublin.

BARNARD, Mr. W. W., has been appointed a Midwifery Assistant at the Steevens's Hospital, Dublin.

BOOKLESS, J. P., M.D., L.R.C.P.Ed., has been appointed a Physician to the Kelso Dispensary.

BROWNE, J. C., M.D., has been appointed a Chancery Visitor of Lunatics, vice Bucknill, resigned.

CLARKE, H., L.R.C.P.I., M.R.C.S.E., has been appointed Resident Medical Officer to the West Riding of Yorkshire Prison, Wakefield, vice Wood, resigned.

CROSS, F. R., M.R.C.S.E., has been appointed Medical Tutor and Sub-Dean at King's College, London, vice Philpot, resigned.

DEVANY, P. C., L.R.C.P.Ed., L.R.C.S.I., has been appointed Medical Officer to the Sligo Model School, and Certifying Factory Surgeon for Sligo, vice Tucker, deceased.

DONOVAN, Dr. J. I., has been appointed Medical Officer to the Royal Gunpowder Mills, Ballincollig, and to the Royal Irish Constabulary, vice Rountree, deceased.

EMINSON, R., M.R.C.S.E., has been reappointed Medical Officer of Health for the Gainsborough Rural Sanitary District: £125 for one year.

ETHERIDGE, G. F. E., L.R.C.P.Ed., M.R.C.S.E., has been appointed Medical Officer to the Bromyard Union Workhouse for twelve months, vice Powell, whose appointment has expired.

FORBES, Dr. L., has been appointed Resident Obstetric Assistant to the Westminster Hospital, vice Davies, resigned.

GIBSON, C., L.R.C.P.Ed., L.R.C.S.Ed., L.M., has been appointed House-Surgeon to the Bootle Borough Hospital.

HARVEY, H. F., M.R.C.S.E., has been appointed Registrar to the London Fever Hospital.

HEAP, C. S., L.K.Q.C.P.I., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the Burnham District of the Eton Union, vice Masterman, resigned.

JOHNSON, J. J., L.R.C.P.I., M.R.C.S.E., has been appointed House-Physician to the Midland Counties Supplementary Hospital for Chronic and Incurable Diseases, Leamington.

KEETLEY, C. B. B., L.R.C.P.L., M.R.C.S.E., has been appointed Assistant Demonstrator of Anatomy at St. Bartholomew's Hospital Medical College.

LOWNE, B. T., F.R.C.S.E., has been appointed Ophthalmic Surgeon to the Great Northern Hospital, vice Vernon, resigned.

LUCAS, T., M.R.C.S.E., has been appointed Medical Officer to the Cambridge Police Force, vice Hough, resigned.

MACKINTOSH, A., M.D., L.F.P. & S. Glas., L.M., has been reappointed Medical Officer of Health for the Whittington Urban Sanitary District for twelve months from the 15th of April, 1876.

MAPLES, R., M.R.C.S.E., L.R.C.P.Ed., has been appointed a House-Surgeon to St. Thomas's Hospital.

NEWBY, C. H., M.R.C.S.E., L.R.C.P.L., has been appointed a House-Surgeon to St. Thomas's Hospital.

NICHOLSON, W., M.D., C.M., has been appointed Medical Officer for the Greenwich Central District of the Greenwich Union, vice Wade, resigned.

NORMAN, J. C., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the Needham Market West District of the Bosmere and Claydon Union, Suffolk, vice Beck, resigned.

POTTER, H. P., M.R.C.S.E., has been appointed House-Physician to St. Thomas's Hospital.

ROSSITER, G. F., M.R.C.S.E., has been appointed Resident Accoucheur to St. Thomas's Hospital.

SAMPSON, H. M., L.R.C.P.Ed., M.R.C.S.E., has been appointed Resident Medical Officer to the Gloucester Infirmary, vice Morris, resigned.

SMITH, J., M.B., C.M., has been appointed Medical Officer for No. 7 District of the Newport Pagnell Union, vice Heygate, deceased.

TURNBULL, G. H., M.D., L.R.C.S.Ed., has been appointed a Physician to the Kelso Dispensary.

WALLIS, F. M., M.R.C.S.E., has been appointed Medical Officer for the No. 4 A District of the Hailsham Union, Sussex.

Births, Marriages, and Deaths.

BIRTHS.

BATE.—On the 2nd inst., at Bethnal-green-road, the wife of Geo. Paddock Bate, F.R.C.S.Ed., of a son.

CUNNINGHAM.—On the 9th inst., at Woolwich, the wife of J. P. Cunningham, M.D., Surgeon-Major Army Medical Department, of a son.

HOGG.—On the 8th inst., at Gunnersbury, Chiswick, the wife of Wm. B. G. Hogg, M.D., of a son.

PEACOCK.—On the 11th inst., at Albion House, Gloucester, the wife of H. Peacock, M.R.C.P.L., of a son.

STEPHEN.—On the 12th inst., at Queen's-gate-terrace, the wife of Andrew Stephen, M.D., of a son.

WOODMAN.—On the 8th inst., at Prospect-terrace, Ramsgate, the wife of Samuel Woodman, F.R.C.S.E., prematurely, of a son, still-born.

MARRIAGES.

GANDY—WORSLEY.—On the 9th inst., at St. John's, Hackney, Wm. Gandy, M.R.C.S.E., of Parkstone House, Gipsy-hill (late of the P. & O. Co.'s Service), to Julia Matilda, youngest daughter of the late Charles Worsley, Esq., of Upper Clapton.—No Cards.

M'INTYRE—STIVEN.—On the 9th inst., at St. Stephen's, Westbourne-park, Andrew James M'Intyre, M.B., to Mary E. M., daughter of the late W. S. Stiven, M.D.

SMITH—GARDINER.—On the 8th inst., at St. George's, Hanover-square, Ernest Louis Tyler Smith, M.B., to Rose Eliza Catherine, daughter of Wm. Gardiner, Esq.

DEATHS.

ALDERTON.—On the 4th inst., at Heigham, Thos. Alderton, M.R.C.S.E., late of Reepham, aged 54.

CLARK.—On the 10th inst., at Cecil-street, Strand, H. Clark, M.R.C.S.E., late of Southampton.

CREMEN.—On the 6th inst., at Millbank-street, David Cremen, M.B., aged 47.

DESMOND.—On the 10th inst., at Irvine-street, Edge-hill, Liverpool, L. E. Desmond, M.D., aged 56.

GRAHAM.—On the 2nd inst., at Stockport, G. Y. Graham, M.R.C.S.E., aged 70.

HASSALL.—On the 13th inst., at St. George's-square, R. Hassall, M.D., late of Richmond, Surrey.

MORISON.—On the 9th inst., at Horton-green, Bradford, Yorkshire Andrew Morison, Surgeon R.N., seniority Nov. 12th, 1813, aged 89.

RIDLINGTON.—On the 5th inst., at Ramsey, Huntingdonshire, Hicks Ridlington, M.R.C.S.E., aged 73.

[N.B.—*A fee of 1s. is charged for the insertion of Notices of Births, Marriages, and Deaths.*]

Notes, Short Comments, and Answers to Correspondents.

WANT OF HOSPITAL ACCOMMODATION FOR INFECTIOUS DISEASES AT SHEFFIELD.

ALTHOUGH the general death-rate in Sheffield has recently been low, the borough has been suffering for some weeks from the prevalence of fever of a severe type, and the resources of the workhouse have been greatly taxed by the necessity for admitting cases which, strictly speaking, are not proper cases at all. This town, however, unlike most other large English towns, possesses neither a fever hospital nor any other hospital accommodation for the treatment of non-pauper cases of infectious diseases. A recent case, in which, after an accidental delay in obtaining an order from the relieving officer, a patient was admitted to the workhouse in a state of delirium from typhus fever, and died shortly after, was the subject of an inquest, at which the guardians were blamed by the jury for what appears to have been a purely accidental delay in the admission of the sufferer. The fact is, the man was very far removed from a pauper, and his friends naturally were averse to sending him to the workhouse until delirium made him unmanageable. It appears to us that the real blame rests with the Town Council, which, as the sanitary authority of the borough, has neglected to provide a borough hospital for the treatment of non-pauper cases of infectious diseases ever since sanitary authorities were empowered to establish such hospitals by the Public Health Act of 1872. Dr. Griffiths, the medical officer of health, has in each of his last two Annual Reports dwelt on the danger to the community arising from the want of this hospital accommodation. In small towns there is some excuse for objection to incur the expense of such hospital accommodation; but in a prosperous community like Sheffield such neglect or parsimony is little short of a disgrace to the town. We may also take this opportunity of saying that no report has yet reached us of any intention on the part of the medical officer of health or the Town Council of putting in force in Sheffield the provisions of the Artisans' Dwellings Act of last session.

Mr. T. Laffan.—The Act referred to applies only to England and Wales.

TREATMENT OF SHOULDER PRESENTATIONS.

To the Editor of THE LANCET.

SIR,—I have just received a letter from DR. P. R. MAXSON, of Syracuse, New York, giving an account of his "treatment of shoulder presentations," and, as it is a matter of general interest to the profession, I have concluded to send it to you for publication.

He says: "I hasten to give you in a condensed form an account of my plan of *treating shoulder presentations*. Gravity is the principle invoked; and I was led to the discovery in 1860 by placing a woman with prolapsed cord on her knees, with her head and shoulders low, as recommended by Dr. T. G. Thomas, of New York, in order to effect its reduction, and finding that while she was in this position an abnormal (abdominal) presentation was spontaneously converted into a normal one. Having reflected on this circumstance, I was induced a few weeks later, when called in consultation in a bad shoulder presentation, to try *position* as a means of rectifying it. I was very anxious in regard to the case, because the lady had lost three children already from 'turning to deliver' in shoulder presentations. Her regular attendant, Dr. G. N. Dox, of Geneva, New York, a physician of attainment and experience, happened to be the *accoucheur* in whose practice the case of prolapsed cord, above referred to, had occurred; and, instead of 'turning' himself, as had been so unsuccessfully attempted in the lady's previous labours, he sent for me in consultation. Remembering the fate of the other children, and finding this one very large, I suggested the feasibility of correcting this *shoulder presentation* in the same manner as I had corrected the *abdominal* in the first instance. With his consent I made the effort in the following manner:—I folded several quilts compactly, laying them one upon another to the height of about one foot, and assisted her to kneel upon the quilts, with her head and shoulders resting upon the bed, and her face forwards, so as to bring her body to an angle with the bed of nearly 90 degrees. I then pressed my hand gently against the shoulder, which readily receded, until I was enabled to clasp the vertex with my fingers, and with the assistance of the next pain to so 'engage' it, that, when the patient was placed upon her left side and the quilts removed, a perfectly natural presentation presented itself. In a few hours the labour terminated in the delivery of a healthy boy, weighing ten pounds. Only a few moments were occupied in the process, and subsequent experience convinces me that *shoulder presentations* can generally be converted in this way into *natural* ones, without a resort to 'turning,' and with no risk for the mother or the child."

I would add that this method of treatment has received much attention in America, and that no inconsiderable amount of testimony has been accumulated in support of its efficacy. Dr. MAXSON also informs me that he submitted his views in this regard some years since to Sir James Simpson, and that they were cordially endorsed by that distinguished gentleman.

Yours respectfully,

Rue Caumartin, Paris, Dec. 9th, 1875. EDWARD WARREN, M.D.

BRITISH QUALIFICATIONS IN CANADA.

EVERY colonial Legislature has the power to enforce medical registration within its jurisdiction. It can require those who have been registered in Great Britain to be registered again in the colony; provided, however, that any person who has been duly registered under the Medical Act shall be entitled to be registered in any colony upon payment of the fees (if any) required for such registration, and upon proof of his registration under the said Act.

P.R.C.S. (Ireland) has omitted to enclose his card.

FEMALE QUACKS AT MISSION HALLS.

SOME time ago we pointed out the sanitary evils resulting from mistaken zeal on the part of the promoters of "missions" who regarded a little hot-bed of pestilence and poverty as their preserve. We contended that the philanthropy of these people was obstructive and mischievous, and we appealed to the common sense of the public to set aside its influence and press forward in the path of uncompromising sanitary reform. We regret that it should be necessary to take up the cudgels against an equally irrational and no less pernicious practice. It seems that the "missionaries" have taken to quackery as a new vagary. Certain lady "philanthropists" indulge the passion for meddlesome notoriety by prescribing for the poor victims of their benevolence. We cannot but deplore the feebleness of a verdict which failed to carry the charge of manslaughter home to these female triflers in the practice of medicine. The proceedings of the coroner's inquest seem to have been treated with contempt by the promoters of the Mission Hall. The medical evidence laid before the coroner showed that a case of bronchitis had been grossly misconducted and practically left without help. We fear the "surprise" expressed by the jury will not occasion the ladies of this interesting mission any great discomfort. Something more than implied censure and covert rebuke is needed to repress the pretentiousness of zeal without knowledge.

An Ulster Boy should consult a medical man.

ANIMAL VACCINATION.

To the Editor of THE LANCET.

SIR,—The letter on this subject in your issue of the 4th inst., as also the notice taken by the Medical Society of London, induce me once again to urge upon the profession, and, through them, on the Government, the importance of establishing institutions in Great Britain where heifer lymph can be obtained. When working at this subject in 1869, I visited Dr. Blanc's establishment in London, M. Lanoux's in Paris, and the large national institutions in St. Petersburg and Brussels, in all of which I spent much time carefully examining the whole bearings of the question. The impression I thus received was so much in favour of animal vaccination (i. e., the vaccination of children with lymph never before in contact with human blood, but which, removed from the cow as the original vaccine, has been transmitted through heifers in successive series *without intermission*) that I published my views on the subject in the *British and Foreign Medico-Chirurgical Review*, April, 1870, and also brought the matter before the British Medical Association and other Medical Societies. Since that date my experience impresses me daily more and more in favour of heifer lymph. I would not urge on our Government the establishment of institutions for the vaccination of calves, and the distribution of lymph from this source, if I regarded such merely as toys or sops to semi-ignorant and well-meaning agitators; but, after bestowing very great care in sifting the question, I feel sure we have no reliable data for stating *positively* that the transmission of vaccine through innumerable human subjects does not modify—that is, cause deterioration in the protective qualities of—vaccine, and the experience of every variolous epidemic furnishes a considerable amount of proof in favour of this supposition. I do not believe in the transmission of disease by vaccine lymph; but it has always appeared to me illogical and unphysiological to insist on the exceptional character of vaccine lymph in this respect. Any other organic fluid transmitted through innumerable animals would be regarded as modified by the process; yet, because vaccine vesicles in the 300th generation from the cow *appear* what is termed normal or Jennerian, it is concluded that the fluid they supply has been unaltered by such transmission. During the last few years I have vaccinated scores of heifers, and likewise scores of children from them, and I never expect nor find either to fail. I am as sure when vaccinating the heifer as when vaccinating the child by the arm-to-arm method of obtaining a full or nearly full complement of vesicles. During the prevalence of the last variolous epidemic in Liverpool I found the advantage of being able to vaccinate heifers, as when the supply of vaccine ran short I was able to supply my colleagues with plenty more in a few days. This employment of retro-vaccine lymph from the heifer I have tried for some years, and found most successful. The proposal I brought forward before the British Medical Association in 1869, and which I would still urge, is the establishment in four great centres (as London, Liverpool, Edinburgh, and Dublin) of the means for maintaining a sufficient succession of vaccinated heifers to afford a constant supply of this lymph. By making a moderate charge to those availing themselves of these establishments, these institutions would be made in a few years self-supporting. Moreover, such institutions need not disturb nor interfere with the existing public vaccination stations; but they would greatly increase the confidence of the public in vaccination by affording the alternative. The cost of maintaining each station would be about £200, exclusive of the vaccinator's salary. The only difficulty I have met with has been in the forwarding of such lymph to distant parts, as India or Africa. On ivory points heifer lymph will remain active almost certainly for ten days, often longer; and, if circumstances required it, no doubt here, as in France and Russia, a special form of capillary glass tube could be produced, which would enable the lymph to be preserved much longer. I have obtained heifer lymph from St. Petersburg a month after its removal from the heifer, and it was still active.

I hope you will excuse me occupying so much space in THE LANCET, but believe that I do so through a feeling of the very great importance of the subject.

I am, Sir, yours faithfully,

Birkenhead, Dec. 7th, 1875. F. M. BRAIDWOOD.

AS USUAL.

SPEAKING of the recent appalling explosion in the mine of the Swaithe Maine Colliery, the *Newcastle Daily Chronicle* reporter remarks:—"Not the least pleasant feature of a day literally crowded with horrors, either for those who descended the pit or those who congregated about the shafts, was the patient and considerate manner in which several doctors waited to give their services should such assistance be needed by the exploring parties."

Mr. Macaulife.—We fear there is no redress.

SEQUESTRATION OF RATES FOR NON-ABATEMENT OF A SEWAGE NUISANCE.

VICE-CHANCELLOR SIR JAMES BACON, on the 9th inst., ordered two writs of sequestration to be issued for non-compliance with orders of the Court for the abatement of sewage nuisances, although he ruled that in each case the writ should not be put in force until the expiration of three months, in order to give time for the execution of the works. The first case was against the Commissioners of the Improvement District of Harrogate, for evading an injunction which forbade them to foul the out-beck with the town sewage, by pouring the sewage upon some land acquired for the purpose, from which it still found its way into the beck, in the condition of which there was no improvement. The Vice-Chancellor, in ordering that the writ of sequestration should issue, made some strong but wholesome remarks upon the evident neglect of the Commissioners. A similar application was in the second case made by the Attorney-General against the Corporation of Newcastle-upon-Tyne with reference to an injunction granted so long ago as 1861, since which the Corporation have adopted the process of defecation in subsidence tanks. The Vice-Chancellor was convinced in this case also that neglect on the part of the Corporation was proved, and granted the writ of sequestration applied for. Whereas it is very satisfactory to find that local authorities are not to be allowed lightly to disregard orders of the Court with respect to the abatement of sewage nuisances, it is impossible to avoid some sympathy with the defaulting authorities on account of the all but insuperable difficulties which in so many places stand in the way of sewage disposal without creating a nuisance.

CHLORAL HYDRATE AS A HYPNOTIC.

To the Editor of THE LANCET.

SIR,—In reply to your correspondent, "F.R.C.P.," who wishes to know what effects the prolonged administration of chloral hydrate has on the system, and whether it ever gives rise to gastro-enteritis, I beg to state that there are several patients in this asylum who have been taking chloral hydrate continuously—i. e., every night—for periods varying from six months to two years, and in no instance has its prolonged use been followed or accompanied by gastro-enteritis, vomiting, failure of appetite, or any symptom indicative of mischief. I generally give thirty grains for a dose, rarely more than forty grains, and in the vast majority of cases I find that it answers the purpose required—viz., to give sleep to excited and restless patients. Occasionally with a fresh patient who is considerably excited, the ordinary dose (thirty grains) does not act; but I attribute that more to the insufficiency of the dose than to the uncertainty of the medicine, as I almost invariably find that the dose of forty grains has the desired effect of procuring sleep. There is a patient here who has taken chloral regularly for over two years, and who could not do without it, and who has fair health and appetite, and no symptoms whatever of gastro-intestinal irritation. I have seen a few, though very few, patients in whom chloral produced slight headache and furred tongue, though in a much less degree than opium generally produces. Chloral hydrate is used largely and daily in this asylum, and in no single instance have I noticed alarming or dangerous symptoms in connexion with its administration. I regard it as a safe and valuable hypnotic in all cases of sleeplessness, and especially so in the excitement of acute mania.

As to whether the prolonged use of chloral hydrate produces change of disposition or perversion of the moral feelings I am unable to say, as my experience in its use has been principally amongst the insane.

I am, Sir, yours respectfully,

J. G. THORNLEY, M.D.,
Assistant Medical Officer.

Leicestershire and Rutland Lunatic Asylum, Dec. 1875.

To the Editor of THE LANCET.

SIR,—In reply to "F.R.C.P." in your last issue, I beg to inform him that I had in 1870 a female patient, who took, after a severe confinement, on several days six drachms of chloral hydrate, and on one day nine drachms (540 grains), with decided perversion of morals. It also produced a tendency to suicide—in fact, anything but sleep,—and had to be abandoned, as its good services passed off after the first few thirty-grain doses.

Yours truly,

West-Green-road, Tottenham, Dec. 8th, 1875. JAMES BUNTING.

X. Y. Z.—Dr. Fenwick's little Manual of Diagnosis, published by Churchill, would probably meet our correspondent's requirements.

THE GOODCHILD FUND.

THE following further subscriptions in aid of the widow and children of the late W. H. Goodchild have been received:—

John Adams, Esq.	£0	10	0	Dr. Andrew	£5	5	0
Alban Doran, Esq.	1	1	0	Dr. Clement Godson	1	1	0
The Misses Ellery	1	1	0	W. S. Savory, Esq.	1	1	0
Cornelius Hanbury, Esq. ...	1	1	0	Dr. Andrew Brown	1	1	0
Alfred Willett, Esq.	2	2	0	Jabez Gravell, Esq.	3	5	4

6, Bedford-place, Dec. 14th, 1875. F. DE HAVILLAND HALL, M.D.

Medicus.—A great many of the cases are recorded in his book, especially the second edition.

"TAPEWORMS": CORRECTION NO. 2.

To the Editor of THE LANCET.

SIR,—Dr. Edwards Crisp, in correcting the notes by your reporter of the discussion on my paper on "Tapeworm," recently read to the Medical Society of London (THE LANCET, Dec. 4th, p. 803), has stated that I said "that they (tapeworms) sometimes were" introduced by eating vegetables. I never said so. What I said was that I had an idea or supposition that they might be like the germs of other parasites. I did not enter into my reasons for this idea; for the object of my paper was purely practical, and relating to treatment principally. My friend Dr. Crisp has mistaken me, and I think it right to correct the mistake.

Yours faithfully,

Euston-road, Dec. 13th, 1875. JOHN BRUNTON.

Dr. J. Birkbeck Nevins, (Liverpool.)—Our information was derived from the newspaper report of the meeting. We are unable to afford the space for our correspondent's lengthy communication. The controversy in which he has been engaged in a contemporary has already been sufficiently extended.

A Subscriber.—Appointments as surgeons to emigrants are obtained from the owners of vessels chartered for emigration purposes. Emigrant surgeons must in all cases be registered medical practitioners.

CASE OF HÆMORRHAGE AND PERITONITIS AFTER EATING CHEESE: DEATH WITHIN FOURTEEN HOURS.

To the Editor of THE LANCET.

SIR,—The following case, as illustrating the fatal effect of over-ingestion of cheese, may have an appropriate significance at the present season, when plum-pudding is in process of gestation, and the fatted ox is under sentence of execution.

About 6.30 A.M. on the 6th of this month I was called to attend M. C——, aged twenty-nine years, a moderately stout woman, married two years, no children. I found her in bed, suffering from intense pain in the abdomen, round the umbilicus. The pain was not increased by steady pressure, but pressure with the points of the fingers aggravated it. The abdomen was like a drum, hard and tympanitic all over, save in the umbilical and hypogastric regions, which were dull on percussion. She stated she was not pregnant, and had menstruated three weeks ago. Pulse slow; hands chilly; countenance sallow; tongue whitish in the centre; skin cool; intellect clear. Being questioned as to what she had last eaten, she said she had eaten some cheese to supper on Sunday night. She had been at church on the 5th, a cold, frosty day, and was apparently quite well then. Early on Monday morning she first experienced pain in the belly, with a feeling of chilliness. The pain gradually increased, and became so excruciating that she called out frequently. Her sufferings induced her friends to try their own remedies before sending for medical aid. Brandy, Cayenne pepper and other condiments were freely administered without any relief, as well as a mustard poultice applied to the abdomen, followed by wet cloths to the site of the pain, which seemed to have no other effect than wetting the patient's linen, and keeping her body in a state of cold damp. This was the treatment pursued before I saw her, and the state of the patient was by no means cheering. The pain had never intermitted from its commencement, though there were slight remissions of it. Vomiting had occurred once, but the precise nature of the vomit could not be ascertained. No cheese was, however, to be seen in it. I then gave her thirty drops of chlorodyne, applied hot flannels to the abdomen, and remained with her for half an hour, during which time she did not vomit. At 8 A.M., being nothing better, I prescribed compound colocynth pill, with one grain of extract of belladonna.—10 A.M.: Her husband called, and asked me to see her again, as she appeared to be worse. She was then doubled up in bed, fixed, as it were, by the pain, and said she felt her bowels in a lump. On examination, a distinct tumour round the umbilicus could be felt, giving one the same impression as that of the uterus when contracted after expulsion of placenta, only its contour was more undefined, and its surface more irregular. Pulse nearly imperceptible; pallor of the lips; hands icy cold. I gave her a hypodermic injection of morphia, one-quarter of a grain. She felt slightly better after this, the pain shifting and becoming more diffuse; the pulse also was easier felt, though small and thready. Having to go away to see another patient at some distance, I ordered a dessertspoonful of wine to be given in my absence, and directed that she was on no account to be left alone or unattended.—12 noon: Her attendant informed me that she had slept for about twenty minutes, had taken some wine, and vomited a quantity of cheese in pieces of about half an inch square. I then administered a mustard emetic, the pain being still very severe, though the sense of it was evidently less. She vomited the greater part of the emetic, and fell back in a faint, but rallied for a few seconds; then fainted again, this time fatally, notwithstanding brandy was given, hot bottles applied to the præcordium, and artificial respiration performed for about half an hour.

The post-mortem examination was made twenty-four hours after death by Dr. MacKenzie and myself. Rigor mortis well marked. A layer of fat, three-quarters of an inch in thickness, was cut through before reaching the linea alba. On opening the abdomen, blood escaped, and was found occupying the general peritoneal cavity. The greater part of the small intestine was of a deep claret colour. The mesentery was deeply congested, the redness being arborescent; its vessels felt varicose to the touch, and had a beaded appearance. Near the termination of the ileum was a twist of the intestine upon its own axis. The portion of intestine below this constriction was of less diameter than that above it, and as congested; but as the twist could be uncoiled, and fluid apparently forced through it, it was doubtful whether it was of ante- or post-mortem occurrence. No perforation of bowel could be discovered; but on making an artificial opening, a considerable quantity of dark fluid blood was found occupying the intestine. The stomach, liver, and colon were if a pale colour; but these viscera were not disturbed from their natural attachments. Further examination being deemed unnecessary, in deference to the wishes of the relatives, who were reluctant to grant a post-mortem, and only on condition that it should be limited to the discovery of the cause of death.

Remarks.—This was evidently a case of perforation and hæmorrhage from the bowel, induced by a fit of gluttony. That the cheese the woman ate ably assisted by its mechanical irritation in destroying life by asthenia is evident, having passed undigested from the stomach into the small bowel, and there given rise to all the morbid phenomena. That it was harmless in itself is proved by the husband of the deceased woman having eaten of the same cheese at the same time, and by his having experienced no bad effects from it. Vomiting was not at all a prominent or an early symptom, as she retained medicine and a drink of gruel. No symptom of gastritis or irritant poisoning existed. An interesting feature in the case is that of the hæmorrhage obscuring many of the symptoms, acting like a hungry leech on the general circulation, and combining with the extreme pain to stop the heart's action. The time had also arrived for the reappearance of the catamenia. Could it be that the presence of the irritant cheese determined the afflux of blood from the uterus to the intestine, and there set up fatal inflammation, the focus of the latter being some latent ulceration of which there was no history during life? The weather was also extremely cold and frosty. Whatever hypothesis is correct, the corollary is plain, that over-ingestion of food may prove as fatal as over-indulgence in drink.

I remain, Sir, yours truly,

Strone, near Greenock, Dec. 1875. R. G. M'CALMAN, M.D., C.M.

ON THE RELATION OF SYPHILIS TO ANEURISM.

To the Editor of THE LANCET.

SIR,—The presence in your impression of the 4th inst. of a leading article on my paper "On Aortic Aneurism in the Army, and the conditions associated with it," leads me to ask for space in your columns in reply to your objections to my deductions.

And, first, I would wish, while generally acknowledging your accurate and full report of the comments passed upon it at the meeting, to supply an important omission—in fact, the only remarks tending in any way to corroborate my deductions. I refer to the observations of the President, Sir J. Paget, who (if I heard his words aright) said that not only was there a growing opinion among surgeons on a connexion between aneurism and syphilis, but also that, in his opinion, speaking as a surgeon, if the subclavian, iliac, femoral, and popliteal aneurisms in young subjects were carefully inquired into, the proportion with syphilis would be found to be equal to that stated in my paper as occurring among the aortic aneurisms in the army. The value of this, coming from such a source, I need not dilate upon. I would also here take the opportunity, in order not to mislead the reader of my paper, to correct the word "saturated" as it occurs in the sentence "saturated with syphilis," better substituted by "undoubtedly infected"; for my object, both in the paper itself and also in my reply, was not to overstate, but to convey the impression that 50 per cent. of the aneurismal cases, either during life or after death, illustrated more or less of lesions (which I detailed) acknowledged specific.

The relation of syphilis to aneurism as a direct cause leading to a distinct change in the inner coat of the aorta.—I need not travel over again the remarks in my paper supporting such a deduction. Suffice it to say that the change in the walls of the vessel is an unquestionable tissue growth, and as such there must be an agency to originate and support it. That this agency is in a certain number of cases syphilis, I consider substantiated by the statistics brought forward by me in the aneurismal, syphilitic, and non-syphilitic cases, as well as by the nature of the growth itself—not to be distinguished in its ultimate elements and phases from the growth, acknowledged specific, occurring on the bones; but whether possible of differentiation from that associated with rheumatism and alcoholism cannot at present be decided beyond doubt. In the opinion of some this does seem possible; for in one of the latest works on Surgery (Holmes, p. 488) I find that "one of the forms of atheroma is preceded by thickness of the internal and middle coat," and from this the aneurism is traced; as causes, atheroma is considered as "indubitably due to alcohol, and by *many* [the italics are mine] pathologists to be a frequent result of syphilis," "the deposit in the syphilitic variety of atheroma being of a fibroid texture." But if the agencies I mentioned be not the originators of the aortic disease, can "undue vascular tension" supply the place of an exciting cause? Now, it is quite true that the most frequent site of the aortic disease is that where the heart's impulse may be considered at a maximum in the arterial system—the ascending aorta. But what then is to be said of those not at all uncommon instances where the disease is in the descending thoracic or abdominal region, or in the cerebral vessels?—for unquestionably a similar lesion is found in the latter vessels, and under similar constitutional infection to the aortic disease. Surely, too, under these conditions, we ought to expect unfaltering evidence in all cases in the heart itself, both in the aneurismal cases and also in the aortic disease cases; but it is not so. Surely, also, it is more than mere coincidence that the aneurisms and aortic disease so closely connect themselves with the syphilitic cases, and avoid the non-syphilitic, while all are exposed to the same vascular tension from dress, accoutrements, &c. On mere mechanical grounds it is easy to understand how extra internal pressure in an elastic tube would lead to dilatation; but we have to do with an actual thickening, diminishing the calibre of the vessel. There is also another point by which the specific origin of the aortic disease is sought to be negatived, and that is the infrequency of associated specific disease in the heart, by which I suppose gummatous growths in its substance are meant. There are grounds of divergency of structure &c. which might be raised against such a suggestion; but I would only say that, as far as I have been able to extend the inquiry, such disease of the heart is decidedly rare, and, if allowed, would equally negative the specific origin of many lesions acknowledged syphilitic.

"Undue vascular tension as the chief cause of aortic aneurism."—Prior to the appearance of your article I must admit that my inquiries into the subject had not shown me that "hammermen and smiths" suffered more in proportion from aneurism than other classes. I had obtained the impression that, to use the words of a writer on Medicine, "the causes of aortic aneurism were decidedly obscure"; and, in the words of a lecturer on Surgery, "that aneurism is seldom met with among those of the lower classes who labour hard and uninterruptedly." If the statistics of aneurism among the different classes of the community, male and female, in civil life show a clear relation to the arterial tension from occupation, then the point must be conceded; but as far as the army is concerned the dispersion of aortic aneurism throughout its components does not appear to me to bear out such a conclusion. The statistics show it to be generally dispersed, but little range being observed between those in one climate and another or occupation. The infantry man in England with his pack suffers no more than does the cavalry man; the special uniform for India and the Mediterranean, and the relief from many accoutrements, make little, if any, diminution in the aortic aneurismal returns; and Mr. Lawson has shown that there is a marked variation in regiments under the same conditions of dress, exercise, &c. The Russian and German armies are certainly worse off than our own in dress, accoutrements, &c.; but I have been personally informed by several of their surgeons that aortic aneurism is rarely seen among the men. It is true that the three-years' system may somewhat account for this, though on this point we must remember that, as seen in our own army, less than three years suffice to exemplify undue vascular tension from chest constriction in the production, not of vessel lesion, but of derangement of the pumping apparatus, the heart; but a more probable explanation of this rarity of aneurismal disease in these foreign armies is the comparative absence of severe syphilitic infection from rigid carrying out of preventive measures, the severe syphilitic lesions in the museum at Netley striking these surgeons equally with the number of aortic aneurisms there displayed.

Did space permit, it would not be difficult to explain the preponderance of aneurisms in the male sex on other grounds than undue vascular tension as a chief cause, and much also might be said upon the excess in the army as compared with civil life; but as you have brought the latter statement especially against my deduction I cannot quite pass it over in silence. Let it be remembered that we are considering the causation of aortic aneurisms in the first half of life, between twenty and thirty-eight years of age; and for the purpose of making a right comparison it is necessary to have clear and undoubted facts on the frequency and severity (for this is a most important point) of syphilis in civil and military life between these ages, and also on the aneurismal prevalence. Have we these data? Do we in the army, in spite of our comparatively accurate statistics, know the extent of syphilitic infection, and how far do the civil returns conform to this requirement? Again, as regards the aneurisms, it is quite clear that in the army we have only become fully cognisant of their great prevalence by all but invariable post-mortem examinations during late years, and is the same evidence forthcoming from the civil side? The argument against accurate comparison, as opposing a pathological deduction, seems conclusive; but, granting an excess of aneurism in the army, there is sufficient in the pathology of aortic disease to explain this without bringing in as a primary agency an ascribed causation not supported by collateral evidence.

It seems to me that the balance of evidence is decidedly in favour of transferring "undue vascular tension" to a subordinate part in the production of aneurism, powerful only after deterioration of the vessel walls has been brought about by internal agencies. Such a theory rationally explains those cases of aneurism gradually arising, without the possibility of linking them with any external or accidental cause; equally as those cases where sudden arterial tension so acts on the weakened patch of disease as to render the sufferer aware of "something having given way."

The chief deduction of my paper is, that the major number of aortic aneurisms in the army is preceded by a nodular disease of the arterial wall, originated by syphilis, rheumatism, and alcoholism, and that the reason why this sequel (aneurism) of the aortic disease is so frequently met with in army life is due to the secondary fostering influence of sudden extra arterial lesion from accoutrements, exercises, &c. How far this deduction is applicable to the early aneurisms of civil life must be tested by the comparative prevalence of the above mentioned or other exciting agencies of the aortic lesion, supplemented by the degree of vascular tension from occupation to which the deteriorated vessel is subjected.

We have the statement of Sir James Paget, that the opinion among civil surgeons of a connexion of aneurism in early life with syphilis is a growing one. The opponents of my deduction are legion, and hence a corroboration of my paper must be sought in time and future experience, and it is to be hoped that the evidence will be guided by the judicious rules you lay down as necessary to the inquiry. I am, Sir, yours &c.,

Netley, Dec. 9th, 1875. FRANCIS H. WELCH, F.R.C.S.

SANITARY IMPROVEMENT IN THE BLACK COUNTRY.

THE Lower Sedgley Local Board at a recent meeting resolved to adopt the majority of the recommendations made by Dr. Ballard after inspecting part of the Black Country last year, when the sanitary condition of the two Local Board districts into which the parish of Sedgley is divided was of such a notorious description. It has been decided that in Lower Sedgley the duties of the medical officer of health shall be precisely those prescribed by the Local Government Board. Hospital accommodation for infectious diseases is being provided. Inspectors of nuisances are henceforward placed under the direction of the medical officer of health. Measures have been adopted to reform the scandalous deficiency of privy accommodation disclosed at the inspection, and to improve the system of sewage removal. Moreover, the Board express their intention to provide a supply of good water and adequate drainage for their district. Indeed, the intentions of the Board appear to be almost everything that could be desired; but good intentions alone will never cleanse the Augean stable that Dr. Ballard found existing in Sedgley. Let us hope that at last the Local Board in Lower Sedgley are in earnest about sanitary reform, and that the Local Board of Upper Sedgley, the larger part of Sedgley parish, will be stimulated to go and do likewise.

Dr. H. K. Oliver, (Boston.)—He has occupied a high position in his time, but is now very far advanced in the "sere and yellow leaf," and quite beyond work.

ATTENDANCE ON MEDICAL MEN'S FAMILIES.

To the Editor of THE LANCET.

SIR,—In your next issue kindly say whether it is illegal for a medical practitioner to attend his wife in her confinement, or to attend any member of his family in a serious illness, and oblige, Yours truly,

Queen's College, Birmingham, Dec. 1875. J. N. SPILLER.

*** There is nothing illegal in a medical practitioner attending his wife in her confinement, or any member of his own family in a serious illness. It would be very absurd if it were otherwise. The objections to a medical man attending any serious case in his own family are not at all of a legal character. They have their basis in a very natural feeling in the minds of medical men against seeing patients of their own kin. The judgment almost refuses to act in such cases, and the mind seeks relief from responsibility. Of course we are speaking of cases of some gravity, and not with reference to those numerous minor ailments for which a parent or a husband has many advantages as an adviser. The reluctance to give advice within the domestic circle varies in degree in different men; but, in all, it becomes strong in grave cases, and he is the wisest medical man who errs on the side of readiness to consult a friend as to the case of any one dear to him; and the friend so consulted should always be well chosen, and one for whose judgment respect is felt. For although a medical man may transfer responsibility, he cannot lay aside his opinions; and it is of all situations the most delicate in which, after consulting a medical brother, you have difficulty in assenting to the course he recommends.—ED. L.

PROF. DITTEL'S OPINION OF OBSTINATE STRICTURE.

AT a meeting of the Medical Society of Vienna on Nov. 5th, 1875, Prof. Dittel exhibited a patient on whom he had performed hypogastric tapping for a retention which had lasted six days (?). The professor had an apparatus constructed for this patient, very similar to that we use in this country. Dr. Dittel (in the *Allg. Wien. Med. Zeitung*) broadly expresses the opinion that when patients are suffering from catarrh of the bladder and enlarged prostate, they would do well to have their bladder punctured at the hypogastrium; and, in order to live long, to wear an apparatus for life, which allows the urine to be received in a receptacle placed under the clothes. This is rather a severe measure for a remediable complaint.

L. J. E., (Cambridgetown.)—Croup is a disease of childhood. It is possible that the attacks may be of an asthmatic character or of nervous origin. At any rate we would suggest that our correspondent should consult some physician, and be guided by his advice.

THE paper of *Dr. James Middleton* (Stow) shall be published.

Dr. McLeod, (Calcutta.)—An article on the subject has been for some time in type, but has been deferred owing to the pressure of other matter.

P. R. S.—Certainly not.

Dr. Crutchley.—We cannot afford the required information, except by saying that the same principle, with an important improvement, is being carried out by a Ventilating Company at 115, Victoria-street, S.W.

POST-MORTEM EXAMINATION OF THE REMAINS OF HARRIET LANE.

IN consequence of the great pressure on our space this week, we are compelled to postpone the publication of the concluding portion of Mr. T. Bond's Clinical Lecture on the Remains of Harriet Lane.

COMMUNICATIONS, LETTERS, &c., have been received from—Prof. Marshall, London; Mr. Bryant, London; Dr. Southey, London; Mr. Hutchinson, London; Sir Dominic Corrigan, London; Dr. Handfield Jones, London; Prof. Stokes, Dublin; Dr. Headlam Greenhow, London; Mr. T. Holmes, London; Dr. Owen Rees, London; Dr. Murchison, London; Dr. Basham, London; Mr. Lawson, London; Mr. Rivington, London; Mr. Gamgee; Mr. J. Lane, London; Dr. Andrew Clark; Dr. B. W. Richardson, London; Dr. Broadbent, London; Mr. Waterer, London; Mr. Francis Hird, London; Mr. G. Cowell, London; Dr. Pitman, London; Mr. Bartleet, Birmingham; Dr. Crichton Browne; Mr. G. Howse, London; Dr. Porter, Dublin; Dr. D. Stone, London; Dr. Hall, Sheffield; Dr. Swyer, Birmingham; Dr. G. Buchanan; Dr. D. Powell, London; Mr. West; Dr. Puzey, Liverpool; Mr. Heaton, Leeds; Dr. Sutton, London; Dr. J. Johnson, Birmingham; Dr. H. Crutchley, Alsagar; Mr. F. Jordan, Birmingham; Dr. Thos. Wilson; Dr. Graham; Mr. Rossiter, London; Dr. M'Calman, Greenock; Mr. Harris, Otago, New Zealand; Dr. Stark; Dr. G. Warren, Paris; Mr. Macnuliffe, Dublin; Mr. Ryley; Dr. Reginald Thompson, London; Mr. Seelie, London; Dr. Ross, London; Dr. Brunton, London; Dr. Bodine, Trenton, U.S.; Mr. Clouting; Mr. Job, London; Dr. Fergus, Marlborough; Mr. Milburn, Banbury; Mr. E. Dowdney, Newcastle, New South Wales; Captain Mercier, London; Mr. Davidson, Birkenhead; Mr. Speller, Birmingham; Mr. Baker, North Aylesford; Dr. Hall, London; Mr. Coulton, Birmingham; Mr. Welch, Netley; Dr. Flowers, Market Rasen; Dr. Nevins, Liverpool; Mr. Breneh, Aston Upthorpe; Dr. Oliver, Boston, U.S.; Mr. B. Hill, London; Mr. Thring, Uppingham; Messrs. Barry, Forest Hill; Dr. Laffan, Cashel; Dr. Mackintosh, Chesterfield; Mr. Stevenson, London; Mr. Gibson, London; Mr. P. Hewett, London; Dr. Nicolson, London; Mr. Williams, Abertillery; Mr. Knight, Hackney; Mr. Hitchcock, London; Mrs. Baines, London; Mr. Hueston, London; Dr. Fenwick, London; Dr. H. Thompson, London; Mr. Baker, London; Mr. Gibson, Tynemouth; Mr. Hull, Manchester; Dr. Fox, Bristol; Dr. Andrew, London; Dr. GreatRex, Lawton; Mr. Custance, London; Dr. Thornley, Newry; Mr. Long, Liverpool; Mr. R. Harrison, Liverpool; Dr. Gill, Folkestone; Mr. Wilders, Birmingham; Mr. J. Clay, Birmingham; Dr. Maclaren, Glasgow; Mr. Hodgkins, Oxford; Mr. Gray, London; Dr. Mackenzie, London; Dr. Blake, London; Dr. Dunglison, Philadelphia; Mr. Cresswell, Dowlais; Mr. Gentles, Derby; Dr. Edis, London; Mr. Brown, London; Mr. Clark, Whitchurch; Mr. Willmore, Stockbridge; Mr. Royd, Rochdale; Mr. Stone, Laurencekirk; Mr. Napier, London; Dr. Jackson, Sheffield; Dr. J. Middleton, Stow, N.B.; Alpha; The Registrar-General of Edinburgh; K. Mc.; Medicus; P. R. S.; M.D.; C. G., Nicaragua; R. D.; Dum Spiro Spero; F.R.C.S., Ireland; A. B. C., Wandsworth; L. E.; L.R.C.P., Barrow; Union Medical Officer; L. J. E.; Z., Wrexham; C. K. W.; A Subscriber; L.R.C.P. Lond.; &c. &c.

LETTERS, *each with enclosure*, are also acknowledged from—Mr. Parrott, Sheffield; Messrs. Munton and Stockton, Banbury; Mr. Bate, London; Messrs. Brown and Co., Aberdeen; Mr. Walker, Corwen; Dr. Hastings, Brixton; Dr. Freer, Rugeley; Messrs. Goodall and Co., Leeds; Mr. Hall, Liverpool; Messrs. M'Gee and Co., Belfast; Mr. T. Watson, London; Mr. Bell, London; Dr. Philpot, Peckham-rye; Mr. Marshall, Moulton; Mr. Morgan; Mr. Henderson, Portobello; Mr. Haviland, Northampton; F. M. R., London; Medicus, Gateshead; R. S.; M.D., Barnsley; C. M.; A. B.; Douceur; M. M.; F. R. S.; H. B.; A. S.; A. Z.; J. M., Seaforth; E. V. E.

Western Morning News, Folkestone Chronicle, Sussex Daily News, Birmingham Morning News, Newcastle Chronicle, Surrey Advertiser, Metropolitan, East London Observer, Huddersfield Chronicle, Manchester Guardian, New Zealand Mail, Isle of Man Times, Cork Constitution, Liverpool Post, and *Croydon Advertiser* have been received.

METEOROLOGICAL READINGS

(Taken by Steward's Instruments.)

THE LANCET OFFICE, DEC. 16TH, 1875.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Wet Bulb.	Dry Bulb	Solar Radia in Vacuo	Max. Temp. Shade	Min. Temp.	Rain-fall.	Remarks at 8 A.M.
Dec. 10	30·38	N.W.	34	35	...	42	31	...	Foggy
„ 11	30·11	N.W.	40	42	...	45	35	...	Foggy
„ 12	30·13	N.W.	41	43	...	47	41	...	Overcast
„ 13	30·23	W.	37	39	...	46	37	...	Foggy
„ 14	30·17	W.	34	35	...	40	32	...	Foggy
„ 15	30·17	S.W.	35	36	...	40	34	...	Overcast
„ 16	30·18	S.W.	35	36	...	37	35	...	Overcast

Medical Diary for the ensuing Week.

Monday, Dec. 20.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M. each day, and at the same hour.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M. each day, and at the same hour.

ST. MARK'S HOSPITAL.—Operations, 9 A.M. and 2 P.M.

METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.

MEDICAL SOCIETY OF LONDON.—8½ P.M. Discussion on Mr. Maunder's Case of "Excision of the Elbow-joint."—Dr. Lauder Brunton, "On the Physiological Action of Alcohol."

Tuesday, Dec. 21.

GUY'S HOSPITAL.—Operations, 1½ P.M., and on Friday at the same hour.

WESTMINSTER HOSPITAL.—Operations, 2 P.M.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.

WEST LONDON HOSPITAL.—Operations, 3 P.M.

PATHOLOGICAL SOCIETY OF LONDON.—8½ P.M. The following Specimens will be exhibited:—Hæmorrhagic Periostitis; Fatty Tumour of Spinal Cord; Injury to Radius from Fracture; Deformity from Rheumatic Gout; Recurrent Epithelioma; Cancer of Heart and of Supra-renal Capsules; Cancer of both Breasts and of Right Ovary; Tumour of Clavicle; Aneurism of Aorta; Arrest of Development of both Forearms; Report of Sequel to Dr. Walker's Case of Recurrent Sarcoma of Leg; Embolic Infarct in Heart Muscle; Aneurism of Heart; Aneurism of Mitral Valve; Displaced Kidney; Epithelioma of Chin (living specimen); Epithelioma of Tongue; Sarcoma of Sciatic Nerve; Cancer of both Breasts and of Ovaries; &c. &c.

Wednesday, Dec. 22.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.

ST. MARY'S HOSPITAL.—Operations, 1½ P.M.

ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.

ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.

KING'S COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at 1½ P.M.

GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.

UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at the same hour.

LONDON HOSPITAL.—Operations, 2 P.M.

SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2½ P.M.

Thursday, Dec. 23.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.

ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.

CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and on Friday at the same hour.

Friday, Dec. 24.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1½ P.M.

ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

Saturday, Dec. 25.

ROYAL FREE HOSPITAL.—Operations, 2 P.M.

CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

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